

The CHILDREN'S NEWSPAPER

AND CHILDREN'S PICTORIAL

The Story of the World Today for the Men and Women of Tomorrow

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EDITED BY ARTHUR MEE

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PART 2 OF THE BIG C.N. BOOK IS READY

IS THE OAK TREE DOOMED?

WORK OF DESTRUCTIVE CATERPILLARS

Giants that Have Resisted Pests for Hundreds of Years

LET THE BIRDS LIVE

A wise statesman, when assured from time to time that the country was going to the dogs, used to take down from his bookshelves a volume of memoirs from an earlier age, his Greville, his Creevey, his Wraxall, his Pepys or his Evelyn.

"In times of crisis," he would say smilingly, "it is comforting to read these old fellows; the country was always going to the dogs in their day, but it is still here."

So when we read today that the noble British oak is doomed it is comforting to pick up old Gilbert White and see what he has to say about oaks.

A statement has been published that unless speedy and drastic measures are taken to stamp out the plague of tortrix caterpillars, which started in 1918, the oaks of southern England are all doomed. The trees have been stripped five years in succession by these larvae, and, according to one authority, many oaks appear to be dying as the result.

What Gilbert White Saw

Without underrating the seriousness of the caterpillars' attacks upon the foliage of the oak, it becomes necessary to ask, Do the oaks die? We hear in the early part of each year of oaks being stripped as bare by caterpillars as by the winds of winter. When the caterpillars cease to feed, and become chrysalids, the oaks repair the damage, and, lo! new leaves cover their mighty frames as if nothing had happened.

Is that a new trait in oak-tree conduct? We turn to Gilbert White, to find that the plague of his time was a destructive caterpillar, the chaffer, and this is what the grand old observer, writing over a century ago, has to say about it: "When oaks are stripped of their leaves by chafers they are clothed again soon after midsummer with a beautiful new foliage; but beeches, horse-chestnuts, and maples, once defaced by those insects, never recover their beauty for the whole season."

All Sorts and Conditions of Pests

Nature's rules are harmonious, but every rule has its exception, and the natural exceptions appear to be casual seasons of excessive numbers of various orders. Sometimes it is caterpillars, sometimes mice, voles, flies, wasps, lemmings, various fishes, and so forth. But is one form of creation to perish in furnishing food for unusual hordes? That is not the rule.

The oaks of England must have withstood hundreds of plagues of caterpillars in their time. The giants live

Chief Scout Greeted Chief Scout



The Chief Scout and the Chief Scout for Wales greeting one another at the great rally in London. Scouts shake hands with the left hand, but, curiously enough the photographer caught the two Chief Scouts using their right hands.

hundreds of years, so that pest after pest, epidemic after epidemic, come and go in the lifetime of a single oak, and leave its head unbowed.

The very fact that oaks, by habit, effect their marvellous regeneration of leaves after such onslaughts, suggests that the species has long practised the mystery of making good after havoc.

Self-preservation is the first law, not only of human nature, but of all nature. Crabs, lobster, reptiles, grow new limbs for lost ones; trees and lesser growths put forth new foliage and new branches to take the place of those of which they have been deprived.

Some scientists tell us that plants think. Well, if they do, none seems to think to greater advantage than the oak. It has adapted itself to endure outrage and conquer tremendous adversity; hence its long and splendid reign as

sovereign of all our native British trees. Still, we shall welcome a cure for tortrix caterpillars, and we suggest a sure and certain one—the sparing of insect-eating birds.

CANADA'S NEW RUNNER

A wonder sprinter has come to light in Canada. He is Cyril Coaffee, of the Canadian National Amateur Athletic Association, Winnipeg.

At the Dominion Championships recently Coaffee realised the dream of all trackmen when he ran 100 yards in nine and three-fifths seconds, a feat accomplished by only three or four men in history. Cyril has since equalled the world's record for 120 yards, and at the great Toronto Exhibition 100 yards event this year he took first place in a large field of runners from all over the United States and Canada.

AUSTRALIA'S FARTHEST NORTH

A RIDE ACROSS THE "WHITE ELEPHANT"

Immense Land in Which Millions Might Live

ARTIST'S PARADISE

Australia's "White Elephant," the Northern Territory, is quite a mammoth, for it covers nearly 350 million acres, and stretches 900 miles from north to south, and about 560 from east to west. So far it has been a very white elephant indeed, of little use to anybody; but it looks as if it will soon have to work on behalf of humanity.

One great difficulty in the way of utilising this large area of Australia is its inaccessibility. There are no extensive railways, and many attempts were made to cross it before the journey was accomplished.

The Switchback Track

Even in these days of powerful motor-cars it is a big business to reach its interior; and Mr. T. McCallum and party, who have just traversed it in three heavy, specially-made cars, had a very difficult journey. Now they had to face a switchback track running up and down for 70 miles over the formidable Depot Sandhills; now they had to be tugged by a rope across swollen streams; now they had to thread their way through ant-hills 30 feet high, "looking like spires which had tumbled from cathedrals."

But the journey was well worth the pains; and the accounts of the Territory given by Mr. McCallum and the naturalist, Captain S. A. White, who accompanied him, show that many parts of the territory are interesting, beautiful, and fertile. Mr. McCallum believes that millions of people might find homes in this immense, unknown land.

A Future Granary

One huge plain, he thinks, might become the granary of Australia, and he points out that the streams coming down the narrow ravines of the Macdonnell Range could be used to irrigate large tracts of country.

For the naturalist and the artist the land is a paradise. Turkeys stroll into the camp to inspect the dinner-table; parrots and kingfishers, birds blue and red and green, flutter through the trees, and "some of the finches were so numerous and so gorgeous that it seemed as if a giant hand were tossing gems into the air."

Grass like a green carpet outspread for hundreds of miles; shrubs gold, orange, and scarlet; lagoons covered with the broad leaves of water-lilies of every shade of blue! So does Captain White picture the flora of the country.

Surely this great White Elephant will one day carry villages and cities on its broad and richly caparisoned back!

THE EVER-WIDENING UNIVERSE

THOUSANDS OF WORLDS BEING BORN

What the Patient Men of Science Saw in the Sky

MEASURING THE VASTNESS OF SPACE

The Harvard University astronomers who have been working for several years in an observatory at Arequipa, in Peru, report that they have finished the cataloguing and photographing of two thousand new nebulae.

Each nebula is a solar system being born, as it were, or each is perhaps several solar systems, so that there probably never was before a catalogue containing so many tremendous newly-found objects. But there are still plenty more nebulae to find and catalogue, for it is supposed that there are at least half a million of them waiting to be mapped.

And all of them spinning, burning, cooling into worlds! It baffles the most vivid imagination.

The Long Watch in the Night

Making discoveries of this kind in the night sky is not an easy matter. Only men of long experience and skill in the use of the telescope are able to see these faint objects, and infinite patience is needed to detect them. Hour after hour and night after night, and often year after year, the astronomer gazes into space without result, and when discoveries are made it is not with dramatic incident that they come.

Equally interesting is the work done in Peru by Professor Harlow Shapley, in charge of the observatory, in making more careful estimates of the distance from the Earth of the great Magellanic Clouds in the southern heavens.

These, seen by the naked eye, are bright patches of milky light not unlike the Milky Way, but far away from it.

The White Ox in the Sky

When they are observed through the telescope, however, star groups and clusters and many nebulae are discerned. The Magellanic Clouds have long been known, for the Arab astronomer Al-Sufi refers to them under the name of the White Ox in his Description of the Heavens, written in the tenth century. Their nature, however, remained a mystery.

A few years ago attempts were made to measure their distance from us, and they were supposed to be 33,000 light years away. Later calculations placed them at 80,000 light years, but now Professor Shapley, after very careful estimates, gives the distance as 110,000 light years.

Millions and Millions of Miles

This is a distance so immense as to pass all human comprehension. A light year is the distance travelled in a year by light, which moves at the rate of about 186,300 miles a second. One light year is equal to nearly 5877,000,000,000 miles, and 110,000 light years is 646,470 million million years.

Another startling discovery just made by the Harvard astronomers is that of a new cluster of stars which increases the width of the known universe to what is described as two quintillion miles.

A quintillion does not mean the same thing in England and America. In England it is a one followed by thirty noughts, but in America it is one followed by eighteen noughts, and this, no doubt, is the figure intended by the Harvard scientists. Put into words we may say this star cluster is a million million million miles away.

MR. FORD MAKES UP HIS MIND

His Works to be Run by Teetotalers Only
AMERICA KNOWS

Mr. Henry Ford has issued notice to his seventy thousand workmen in Detroit that any man known to drink alcohol, either in the works or in his home or anywhere else, will be dismissed.

The most efficient workshops ever known on the face of the Earth are to be run entirely by teetotalers.

There will be much criticism of Mr. Ford, but his notice is characteristic and entertaining:

From now on (it says) it will cost a man his job, without any excuse or appeal being considered, to have the odour of beer, wine, or liquor on his breath, or to have any of these intoxicants on his person or in his home. Prohibition is a part of the fundamental laws of this country. It was meant to be enforced. Politics has interfered with enforcement of this law, but so far as our organisation is concerned it is going to be enforced to the letter.

A Nation Free from Drink

Most people in America agree with Mr. Ford, and there can be no doubt that the next generation of Americans, which will see their country at the head of the trade of the world, will be entirely free from the burden of drink.

We quote this striking statement from The Times on the coming State elections:

Whatever else may be the outcome of the November elections, there is not even a remote possibility that the next Congress will be favourable to a modification of the Prohibition law.

Attempts to raise that issue are falling flat in most sections of the country. The agricultural sections and the Western States are so strong for the existing law that the "wet" force have no chance of mustering an effective vote in either Senate or House.

Clearly, whatever difficulties she has in her path, America's mind is made up.

THE PIT BOY AND HIS PAL

Life of the Pony in the Mine

From time to time the above-ground world hears of cruelties suffered by the ponies that pass their lives in mines. Such cases do occur, no doubt, but in almost every instance they give a wrong impression of how the ponies are treated by their human companions in the mines.

A C.N. reader in Durham County sends us an account of the life of the ponies in the pits as he has seen it while working among them. He says these sturdy little creatures are intelligent, faithful, and extremely hard-working, and they fit into their way of life quite easily.

The ponies are exceptionally well fed, though the only green grass they see is what the boys take underground to them. Their condition is a credit to their owners and to the boys who have charge of them day by day.

One cannot help loving them as they come nosing round at lunch time to find a piece of bread. The last piece frequently goes to little Don or Vim, and they are often coaxed with sugar and apples. It is not at all uncommon to see a boy caressing his little charge.

Accidents happen to ponies as they happen to the miners, and First Aid is given to pony and man alike. That these dumb creatures appreciate what is done to alleviate their sufferings is quite plain. Indeed, the general life of the pit boy's pal, his pony, is not what might be imagined from the accounts that occasionally reach the surface.

Last Month's Weather

LONDON		RAINFALL	
Hours of sun	95.7	London	ins. 2.13
Hours of rain	37.9	Exeter	ins. 2.73
Wet days	14	Newcastle	ins. 4.34
Dry days	16	Cardiff	ins. 3.83
Warmest day	6th	Fort William	ins. 3.54
Coldest day	30th	Dublin	ins. 2.58

DOG GOES FOR A HOLIDAY

A Trip to Shetland

TOBIAS AND HIS SIXTEEN DAYS' ADVENTURE

There is a dog in Scotland who should be proud of himself. Ever since he watched his master and mistress go aboard one of the big coasting steamers to start their holiday trip he had been determined to take a holiday too.

While his master and mistress were away he felt it his duty to mind the house; but the first time he was taken for an evening run after their return he made off in the direction of the docks from which he had seen their steamer start. His master, following, saw Tobias disappear over the side of the wharf on to the deck of one of the big cargo vessels which lay alongside and was due to put out to sea with the tide.

Of course Tobias was captured, put on the lead, and taken home. But he was not daunted. Day after day he

£10 for a C.N. Reader

Which are the best pages of the Children's Encyclopedia, which everybody is reading now?

The C.E. has nineteen groups: Earth and Its Neighbours, Men and Women, Stories, Animal Life, History, Familiar Things, Wonder, Art, Ourselves, Plant Life, Countries, Picture Atlas, Poetry, Power, Literature, Ideas, The Bible, Things to Make and Do, School Lessons.

The Editor would like to know which of these divisions are most popular with his readers, and he therefore asks them to send in on a postcard the name of the ten divisions they like best.

Take a postcard and write the ten divisions down, one under the other, thus: Men and Women
Poetry

and so on, in any order you prefer, and at the bottom of the postcard write your name and address. Send this to C.E. Award, Gough House, Gough Square London, E.C.4, to arrive not later than November 9.

The lists will then be compared, and from them will be selected the ten groups receiving the highest number of votes. To the reader whose list comes nearest to this in the order in which he writes the groups, an award of £10 will be sent. Only postcards should be used.

In the unlikely event of a tie, the Editor reserves the right to divide the £10 equally.

No lists can be returned, no correspondence entered into, and the Editor's decision is final. Employees of the proprietors of this journal are not eligible to compete.

Parts 1 and 2 of The Children's Encyclopedia can now be bought at any bookstall.

awaited his opportunity, and one fine morning he managed to slip away unnoticed. Again he made his way to the docks, and this time there was no one to follow him.

He waited till all the seamen on the coaling barge were engaged on the farther side of the ship, and then he jumped quietly down and hid himself among a coil of ropes on the deck.

Perhaps it was because his tawny coat was so similar to the colour of the ropes that he was not noticed till the vessel had been at sea some hours.

For sixteen days Tobias was missing from home. Then one afternoon he returned, and it was discovered that he had been on a trip to the Shetland Isles and back. The seaman who first discovered him among the ropes brought him back to his owners, guided by the name and address on his collar.

EXPEDITION TO SEA

COD FISHERIES OF OUR OLDEST COLONY

Going Out in the Spirit of Sir Francis Drake

THE BAD OLD DAYS

A new expedition, with a new idea, has left Hull to fish for cod on the famous banks of Newfoundland. The trawlers are going out with wireless, with food to last several months, and with the means of curing their catch on board.

To read this is like turning back the pages of three centuries of history to days when the cod-fisheries of our oldest British colony formed one of the wildest romances of the age. The new craft are big, and have steam and every modern appliance; the little ship in which Sir Humphrey Gilbert took possession of the land for us in 1583 might have ridden on the deck of one of them.

She was the precursor of a famous line of similar vessels—tiny, undecked, leaky, crazy little craft, in which men, half-frozen, half-drowned, their hands bleeding as they hauled on the ropes in the bursting surge, weak from bad and insufficient food, fearful of demons and ogres pictured by legend, were yet inspired to a mighty heroism, partly for love of gain, partly out of that national pride which made the men of Drake's age the successors to the Vikings in every sea that ship could sail.

A Little League of Nations

They were bad days, with Europe at war for the best part of a century, with English, French, Spanish, and Portuguese ever fighting at sea. Yet ships manned by each of these warring peoples met off Newfoundland in perfect harmony. Side by side mariners from each of these four countries pursued their dangerous calling in peace. They created a little League of Nations of their own.

On the high seas they would do battle at sight, but there, where there were cod to be caught, they were a band of brothers. If some cranky ship were about to founder through greater leaks than usual the crew of a rival nation would put off to help to bind her bulging hull with ropes.

Love of Adventure

Together they lit their fires on shore for curing their fish, and cooperated as only friendly sailormen in foreign ports can. War on the open ocean, peace in that sea sanctuary amid the fog and murk and money of Newfoundland—such was the rule of that age.

That was the one touch of imagination in a wild, weird life. The conditions were appalling for the men, apart from hardships and evil food. A tyrannous captain could cut off an offender's ears or mutilate his nose, or even impale him alive. But the men were part owners of the fish that were caught, and they bore everything for the love of adventure and to earn enough money to live.

FUELLING AN OIL-SHIP

The Hollow Tow-Line

Great difficulty has always been experienced in transferring oil from a tanker to an oil steamer when at sea. If an ordinary pipe were run out between the two vessels it would quickly snap owing to the rolling of the ships, even though several tow-lines were used.

Now pipe and cable are made into one. The tube is encased in many strands of steel wire, and the big steamer simply takes the tanker in tow and oil is pumped through the pipe running through the middle of the cable.

October 28, 1922

The Children's Newspaper

THE AMAZING EEL

A WONDER MORE AND
MORE WONDERFUL

Fishes That Never Take the
Wrong Turning

HOW NATURE TAMES HER CHILDREN

As readers of the C.N. know, a Danish scientist, Dr. Johannes Schmidt, has for many years past been making a close study of the eel, and trying to solve the mystery of its life-history.

In the Dana, a vessel fitted up as a scientific laboratory, he has been dredging in the Atlantic, and has made some extraordinarily interesting discoveries.

In 1903, when he was engaged in studying the edible fishes, Dr. Schmidt's attention was drawn to the great profits made by the Danish fishermen who caught myriads of eels during their autumn migration through the straits. These were different in appearance from the river eels, and were called silver eels.

Marking the Eels

In order to find out where they were going, a large number were taken and marked and then set free again, and the fishermen were asked to let the Danish Oceanographical Institute know where any of these were recaptured.

By means of this information it was found that the eels left the Baltic, passed through the North Sea, and reached the ocean either coming down the Channel or going north, around Scotland, but after that they could not be traced any farther.

Then Dr. Schmidt decided that the next thing to be done was to find out where the smallest eels could be found, and with infinite patience he traced them farther and farther into the Atlantic, until he came to the conclusion that the eggs must be laid somewhere to the north-east of the Bermudas.

Two Kinds of Eels

At last he succeeded in finding the eggs of the eels in the great depths, and has brought back also tiny specimens just hatched, not half an inch long and no thicker than a bit of cotton. These little creatures are carried toward Europe by the Gulf Stream drift, and change their form before leaving the sea to go into the fresh water of the rivers.

But the most interesting discovery made by Dr. Schmidt is that two different kinds of eels breed near the Bermudas, one travelling west to America, and the other east to Europe.

The only difference between these two kinds of eels is that one has fewer bones in its backbone than the other. Both species were often taken in the same net.

Why is it, then, that one kind invariably makes its way to European rivers, while the other kind goes to America? Why do not the American eels sometimes come to Europe, and the European sometimes go to America?

Nature's Strange Ways

The answer is that they cannot, and if they tried to they would die. In the European eel the larval stage lasts for three years, whereas in the American it occupies only one year. If, therefore, an American eel tried to reach European rivers, it would find itself in mid-Atlantic when it emerged from the larval stage and needed fresh water. Being unable to get it the eel would perish.

Similarly if the European eel were to try to reach American waters, a journey which takes only a year, it would arrive in fresh water two years before it was ready to leave the larval stage. It would be unfit for fresh water, and would die.

So by that mysterious power of instinct, or heredity, or whatever it may be, the American and European eels, although born together, never take the wrong turning, but always turn east and west according to the species they belong to.

WILD PONIES OF THE NEW FOREST

Jack, the forest dog, helps to round up the wild ponies

A typical group of colts gathered together for identification

Cutting one side of the tail as a mark of identity

In the New Forest a number of ponies are allowed to run wild, and these are rounded up once a year near Brockenhurst so that the young animals may be given some mark of identity. These pictures show the annual event in progress. Not long ago motorists found difficulty in passing through the New Forest at night owing to these ponies straying on to the road

SURPRISE FOR A GUIDE

The Visitor Who Knew A KING'S WORK FOR HIS COUNTRY

A few years ago one of the guides in the cathedral of Aarhus, in Jutland, had a great surprise.

Writing in The Times, a correspondent, Mr. R. F. Lyne, says that he was being shown round the cathedral when the guide pointed out a tomb on which was cut a coat of arms, and asked him if he knew to what family the arms belonged. Mr. Lyne had no idea.

"Ah," said the guide, "that is the reply that every visitor gives me. Only once has anybody recognised those arms."

When asked the usual question the visitor the guide referred to replied, to his astonishment: "They are the arms of the Hamlet family." The man who knew was the present king of Siam!

The king, who was educated in England, is a great lover of Shakespeare, and would certainly seem to be a greater student of his plays and everything bearing on them than many of the poet's own countrymen.

A Pioneer of Progress

On his accession in 1910 King Rama became a zealous pioneer of progress and enlightenment in his country. He began by making a royal decree that all the king's property was to be taxed just as any other property. He abolished lotteries and gaming-houses, reformed the old-fashioned Siamese calendar, bringing it more into line with modern requirements, and reorganised the Red Cross Society. He founded a splendid hospital in his capital, Bangkok, and equipped it with the most up-to-date laboratories for research.

When he left England he carried back to Siam with him the public schoolboy's love of manly games, and encouraged them to such purpose that now all over the country cricket, football, tennis, and other games are played by high and low.

He is a great supporter of the Boy Scout movement, and there are thousands of scouts all over Siam.

Those who know the king, and the wonderful work he has done for his country, are less surprised than the Danish guide by his knowledge of the carvings in the cathedral of Aarhus.

DIRTY FOOD

How Disease is Spread in London

By Our Medical Correspondent

The C.N. has several times complained of the dirty way in which milk, meat, and other foods are handled in London streets, and also of the exposure of meat outside shops, and we are glad to see that Sir Charles Higham, M.P., has called attention to this menace to health.

It is well known that milk containing germs is the cause of many diseases, and though dirty meat is not so dangerous because it is almost always cooked before eating, it is nevertheless dangerous, and may be the cause of various obscure digestive ailments.

It is unpleasant even to think of the contamination of the meat which must occur when it is exposed to flies and dust in a dirty street where even scavenging may be going on. Even if filthy-footed flies are kept off by gauze, the air is full of dirt and of dangerous bacteria, and gauze is about as useful against them as a fishing-net.

Meat should be as carefully protected from dust and germs as an open wound, and any butcher who introduces more cleanly methods of keeping and handling meat will surely be well patronised.

Cannot the Ministry of Health stop the dirty way in which meat is carried through the streets past its very windows every day in open vans?

WIRELESS FOR THE MINER

NEW LIFE-SAVING DEVICE IN THE COLLIERY

Sending the Voice Through a Wall of Earth

AERIAL IN A TRAVELLING CAGE

Who can tell into what new spheres of usefulness wireless will develop?

Today it saves the lives of men at sea, it tells the weather daily, it helps to make flying safe, and it gives to thousands of clocks over all the world the correct time every few hours.

Soon it may be a means of saving life in the mine. This is a possibility proved only a few days ago by a small party of wireless amateurs from Birmingham.

With portable receiving and transmitting sets they went to Baggeridge Colliery, at Willenhall, in Staffordshire, where the main pit-shaft is one of the deepest in the country. With quite ordinary instruments they set out to prove that communication by wireless between the pithead buildings and men working thousands of feet below can be established.

Signals Grow Louder

The receiving aerial was a length of wire slung from the top of the steel hoisting gear at the top of the shaft to a railway bridge near by. The transmitting set was first installed in the cage, the aerial being made with a lattice of wires in the roof. The connection to earth was made by fastening wire to the floor of the cage.

The cage was lowered gradually and transmitting begun. It was curious to find that, contrary to expectation, the signals grew louder as the cage went lower, reaching their strongest when the cage was two hundred yards down. This was due probably to the steel structural work inside the shaft near the top, which would have an absorbing effect upon the wireless waves near them, thus diminishing the signal strength.

Voice Travels in a Flash

It was found that the signals faded away completely when the cage reached the bottom, for here there was more "screening" by steel work.

Another interesting thing was noticed, a heavy leakage of the transmitting power into the air around, which, being full of carbon elements from the mine, absorbed the liberated electrical energy very quickly.

By taking the set along the workings away from the shaft communication was quickly established again. This was nearly three-quarters of a mile below the surface. The voice was travelling in a flash through all the intervening earth!

It ought to be possible to construct cheap fool-proof sets which could be set up in various parts of the mine. Then, in a disaster, the entombed men could make known their exact position, and loss of life through the delay be avoided.

Broadcasting in the Mine

Wireless has on at least one occasion been the means of saving the lives of entombed men when all other hope had gone. During the war, when a party of British engineers burrowing far below no-man's-land for enemy mining operations were suddenly entombed by an explosion, they were surrounded by an impenetrable wall of earth. One of their number had a small wireless transmitting set, with which experiments were to be carried out below the ground. The range of this set was very small, but as a last resource it was decided to "broadcast" a message on it.

To the intense relief of the imprisoned men this was immediately answered by an operator in an aeroplane travelling at a high altitude above the scene of the explosion. Help came in time, and all the party were saved.

BIRMINGHAM AND THE SEA

Will They Be Linked Up?

SCHEME FOR A GREAT MIDLAND CANAL

It will be a marvellous thing if within a year or two, Birmingham, the city farthest from the sea, becomes a port, shipping at its own doors all the goods that it makes for the world's markets.

Such a development has been dreamed of and talked about for thirty years. Manufacturers and men of commerce know that it will bring new life—not only to the city, but to the vast industrial area of which it is the core.

Since the war heavy railway rates and long delays in transit overland have been a serious hindrance to industry, and in not a few instances works have had to close down very largely for these reasons, throwing thousands of men out of work.

The scheme has attracted wide interest, and the Birmingham City Council and commercial bodies are urging it forward.

If accomplished it will be a great engineering feat, equalling that of the famous Ship Canal which joins Manchester with the sea.

Cheap and Rapid Transit

In the Birmingham scheme it is proposed to make the Severn navigable for 100-ton boats as far as Worcester, by means of dredging and widening. Then the existing canals between there and Birmingham—28 miles of neglected strips of water—will form, as it were, a guide-line for a broad and deep waterway, by means of which the boats will be able to proceed right into Birmingham.

In this way a quick and efficient means of transit will be established, and if only it can be made cheaper than the railway the scheme will confer immense benefits upon the areas concerned.

Although the scheme only makes provision at present for the passage of 100-ton boats, it is by no means improbable that it will be elaborated so that bigger vessels could go to Birmingham.

THE BROWNIE'S BOOK

By the Girl Who Wrote It

It has always been wanted—the Brownie Book, and now it is here, published by Mr. Humphrey Milford at 2s. 6d.

We asked the author why she wrote it, and she sends us this jolly note.

Do you know why I wrote this book? Because I love Brownies, and I thought they ought to have a story-book of their own. There were heaps of stories for Guides and Scouts, but there was no really-true story for Brownies.

So I put on my thinking cap and wrote a story, and Mr. Milford published it at the Oxford University Press at half-a-crown. On the cover is a painting of Meg telling a tale to the pack, and across it the name of the book, Meg of the Brownies, by Margaret Stuart Lane.

Meg lives in a lovely old farmhouse in Sussex, and the story tells of what happened to her—some jolly things, some sad things, and some exciting things; and the nice things she made happen to other people, chiefly poor Ellen Glaysher, who was lonely and had no mother.

I smiled a good deal when I was writing about Meg, and once I cried, because before I had finished Meg's story I loved her very much, and I hope when you have finished reading about her you will love her too.

Then there is Sammy, aged four, who likes to think a thing out before he speaks; and tall Lucy Lindon, the patrol leader; and Kathie Nelson, Meg's chum, who has a little pet monkey called Mick that meets her every day coming home from school. How real they all are to me! I can shut my eyes and see that old farmhouse on the Downs with John Lindon, 1743, chiselled faintly over the door; and sometimes I can hear Meg laugh.

STORES FOR LONELY ISLAND

Handsome Gift for Tristan da Cunha

GOOD SAMARITAN SHIP WANTED

The people of Tristan da Cunha will have a royal time when the new cargo of stores reaches them.

A London gentleman who interests himself in these lonely people of the South Seas was greatly concerned when he heard from Commander Frank Wild of the Quest that the island's stores were at vanishing point, and that in some essentials of life they were threatened with want.

He approached a number of big firms of manufacturers in this country, and as a result these have generously provided a splendid supply of stores, which will be sent out to Tristan da Cunha as soon as a ship can be found going that way.

Among other things ready are six bales of clothing containing more than 500 garments, two tons of granulated sugar, a quarter of a ton of cocoa, two chests of tea, four cases of biscuits, 72 pounds of candles, a hundredweight of caustic soda, 3600 boxes of safety matches, three cases of soap, two cases of window glass with cutting instruments, a case of carpenter's tools, and quantities of rope and nails.

Never before have these lonely islanders received such a handsome present, and it is difficult to realise what their joy will be when the goods reach them. Let us hope that a ship will soon be found to act the part of the Good Samaritan.

UNDER CARTHAGE

History Traced to a Dimmer Past

EGYPTIAN FOUNDATIONS FOUND

Carthage, one of the great cities of antiquity, once the African capital of the Phoenicians, has been insufficiently explored underground.

Its legendary foundation by the Phoenicians was about 822 B.C., and later it attained great fame as a commercial and maritime centre. Here Queen Dido lived luxuriously.

The city met the Greeks and Romans successively on equal terms in the palmy days of each of those masterful races. With nearly a million people it dominated the Mediterranean Sea.

Then it became ambitious, invaded Europe, seriously, was defeated, and in 146 B.C. was captured by the Romans and destroyed. Twenty-four years later its restoration began. Again it rose to considerable prosperity, but was finally conquered by the Arabs in A.D. 698.

Its past distinction has been found by excavations chiefly in the Roman and Greek periods, but now deeper digging is disclosing an earlier foundation than that of the Phoenicians. The first civilisation is seen to be of Egyptian origin, possibly a thousand years before the settlement of the Phoenicians.

DENTISTS AND DENTISTS

Trained and Untrained

Five hundred dentists are leaving the British Dental Association and forming a new organisation, to be called the British Society of Dental Surgeons.

They claim that the Dental Association has admitted members who have no medical training, and the new society will make specialised training and hospital experience a condition of membership.

No doubt dentistry is partly a mechanical art, and dentists with deft fingers and mechanical ingenuity may be more skilful than many men of higher training; but on the whole the strict tests required by the new society seem to be desirable, for, though they may rule out some skilful men, they will guarantee scientific training and a certain standard of skill.

LOOKING AFTER WREN'S DOME

WEAR OF TIME ON GREAT BUILDINGS

What Has Been Done at St. Paul's in the Last Ten Years

NEW WORK TO BEGIN

No work of man will endure in the open air the wear of Time.

Sooner or later crumbling begins, and destruction follows faster. Time "feeds oblivion with decay of things." Left alone they perish and are forgotten. So, if we value them, they must be examined and renewed constantly.

Many of our great and glorious buildings are in peril now, and are having to be saved. Lincoln Cathedral, a splendid pile that looks from its hill around its fine shire and far across the Midlands, is cracking. Westminster Hall, first built by William Rufus, and the scene of over 800 years of thrilling history, has just had its roof renewed. The roof of St. George's Chapel at Windsor threatens to collapse. Westminster Abbey, the stateliest church in the world, is showing gaping cracks; and great St. Paul's, presiding so nobly over the world's mightiest city, is in trouble.

Sights that Live

"Dull would he be of soul" who could think of these rare monuments of our forefathers' art and faith and not be stirred to a helpful sympathy. And so we call on all our readers to think for a few of Time's unending moments on what is being done to preserve the great dome raised by Christopher Wren amid London's "central roar."

The two sights of London that live most sacredly in the hearts of the thoughtful are the Abbey's "long-drawn aisles and fretted vaults" and the City's great dome with the golden cross.

But that mighty dome, immense in its weight, is reared high above a foundation of sand. Eight great piers of stone hold it dizzily aloft, north, south, east, and west, two to each quarter. Here, as everywhere, Time has been showing its fateful power slowly but surely. Ten years ago the warning went forth that the great cathedral was not as safe as it should be.

Strengthening the Piers

Since then ten years of steady work have been done in strengthening the two lofty piers that support the dome on its southern side, and now the report is made that on that side all has been done that can be done to restore safety and replace what has been worn by Time.

At first it was thought the foundations of the massive pile might perhaps be renewed, but examination showed that it was better to refrain from burrowings underneath, and that the building would remain firm and stable as it is if no disturbance were allowed below for tubes or other subterranean workings.

Now the piers which support the dome on its northern side are being surrounded by scaffolding, and the work of strengthening them is beginning. Later the remaining four piers will have their defective masonry removed and new stone will be substituted, so that great church may long continue to reign in a safe sublimity over the great city.

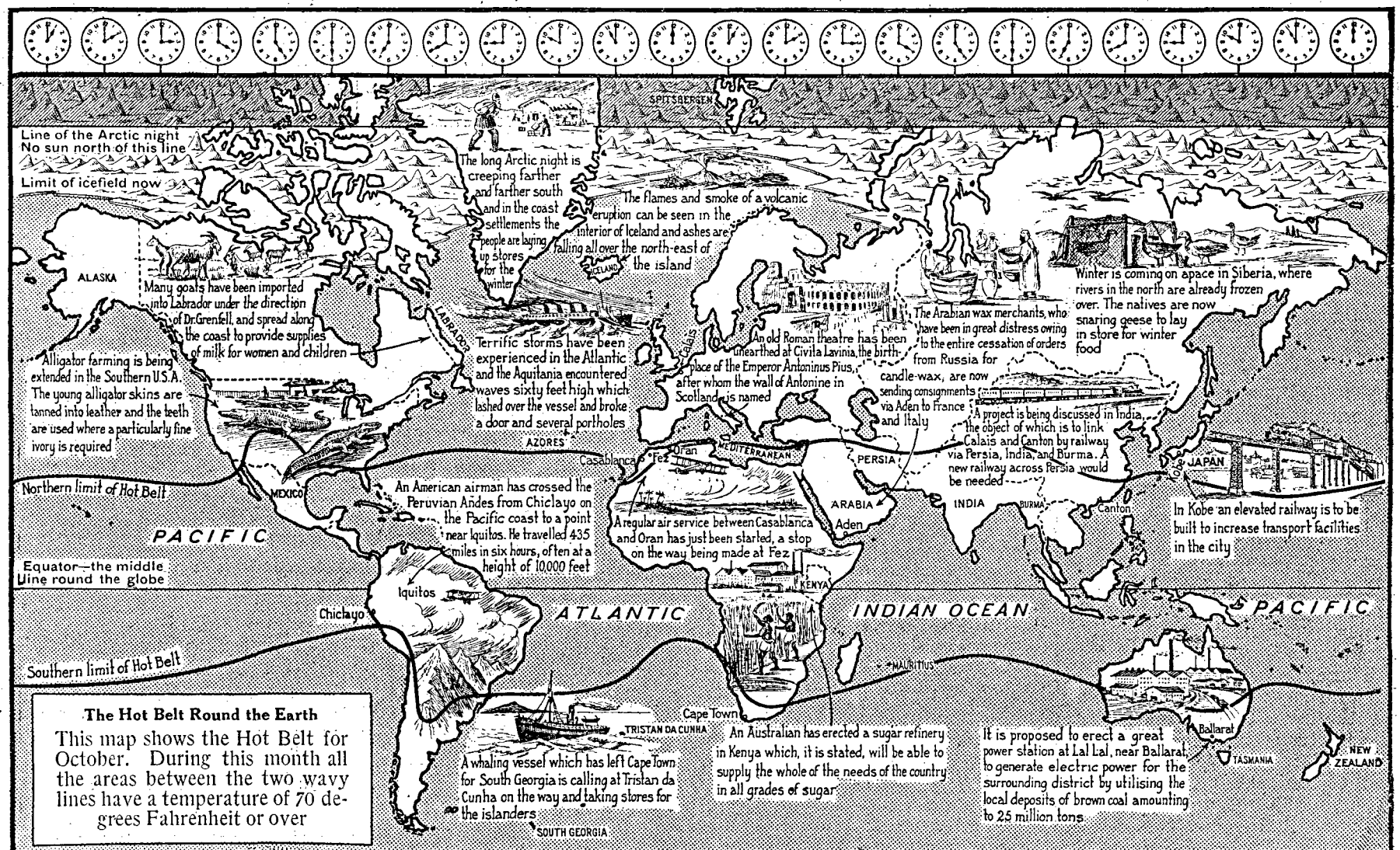
For this fine enterprise £100,000 will be needed; the honourable pride of London will surely find that sum.

In the Auction Rooms

The following prices have lately been paid in the auction rooms for objects of interest.

A Chinese lacquer wardrobe	£200
Eight Chippendale chairs	£100
A Jacobean carved oak cupboard	£95
A Louis XVI painted cabinet	£85
A New York 5 cents stamp	£21
A Henry VI gold coin	£20
A Uruguay Diligencia stamp	£13

PICTURE-NEWS & TIME MAP SHOWING THE HOT BELT ROUND THE WORLD



MESOPOTAMIA A NATION Great Step Forward

A great step forward has been taken by Mesopotamia toward complete nationhood.

A treaty has been signed between the country of King Feisal and Sir Percy Cox, representing Great Britain at Baghdad, which provides that Mesopotamia shall become an independent State, able to take its place in the League of Nations.

Great Britain's nursing of this ancient land into a new manhood will be so far completed when it joins the League that the mandate by which Great Britain overlooks the government of the country will have been fulfilled and will cease.

As regards international affairs and financial matters, it is provided that the new country shall seek the experienced advice of the British Commissioner in Baghdad.

There has been much criticism of the part taken by Great Britain in the Euphrates Valley since the war, particularly on the score of expense, but if the treaty now signed is successfully carried out, and if Mesopotamia proves itself able to act with wisdom as an independent State, its future will be one of the blessings arising out of the horrors of the Great War.

RAT STEALS A BLOUSE A Story from Brazil

We have often had stories of the thieving habits of jackdaws, but here is one of rats.

When we lived in Brazil Mother lost a blouse. For weeks she thought that either the laundress or the parlour-maid, who were both Portuguese, had taken it; but one day she saw what she thought was a little bit of rag in a corner, and when she took hold of it and pulled it, out came her blouse from a rat's nest!

A few weeks afterward Daddy's socks were missed, and were pulled out of the same hole.

THE LEOPARD CHANGES HIS SPOTS Can a Negro Turn White?

By Our Medical Correspondent

It is reported that three years ago white spots began to appear on the black skin of a Californian Negro, and that the spots gradually spread till now his skin is entirely white.

The report is difficult to believe; but it is not impossible that there may be some truth in it. We do not understand the meaning or the nature of the pigments in the skin, but we do know that they are considerably affected by light and constitutional changes.

Some white men when exposed to strong sunlight become deeply pigmented; and there are various diseases and conditions of the body that reduce or increase its pigmentation. It is therefore possible that some abnormal chemical process in the body of a Negro might bleach or destroy his pigment and render his skin white; but such a process would be more likely to be a process of disease than of health, and the white skin would probably be comparable rather with the white skin of a leper than with the white skin of a white man.

THE GOLFER'S STROKES A Meter to Count Them

A clever invention for counting golf strokes is having great vogue in the United States.

It is in the form of a wrist-watch, but instead of the usual dial it carries a stroke recorder. The player presses a button each time he takes a stroke, and the little machine registers it.

To avoid possible argument as to the number of strokes taken in a game, or to a hole, the recorder makes an audible click when it registers, so that the opponent may know that the stroke has not been "skipped."

BUFFALO VALLEY Odd Story of 500 Buffaloes

A queer story, if true, has been told of Andreas Lopez, a Mexican rancher, and his cowboy Manuel Flores, who started off a few weeks ago in a spirit of adventure, to explore a rocky canyon in the South of Texas.

Fifteen miles up the canyon they came to a barrier of rock more than 600 feet high. Up this barrier they clambered with great difficulty, and on the top found to their intense surprise a beautiful level plateau about 40 miles long and 25 miles wide, surrounded by hills some 2000 feet high. The valley was carpeted with luxuriant grass, and had crystal streams and woods; and in the woods were birds of gorgeous plumage.

But the most surprising thing of all was that in this lovely valley was a herd of 500 buffaloes whose ancestors had apparently entered the valley by the route taken by the explorers, and had been afterwards imprisoned by an avalanche of rock preventing their escape. There they had lived and grazed, undisturbed by man, until at last the adventurous rancher and cowboy discovered their retreat.

Evidently there are still adventures to be had in the canyons of Texas!

THE SHEEP AT THE PRECIPICE How 2000 Went Over

At Grenoble in France, some rams, frightened by a dog, plunged over a precipice, and two thousand sheep followed the lead of the rams and leapt to destruction.

Not a sheep looked before it leapt; over the precipice, like a white, foaming cataract plunged the whole two thousand. Numbers were killed by the fall; numbers were crushed under the weight of others falling on them; and the faithful shepherd who tried to stop the headlong rush was himself carried over the precipice and severely injured. It must have been like the rush of the Gadarene swine in the Bible.

IRELAND'S MOVEMENT TOWARD PEACE The Treaty Signed

The Irish Parliament has at last agreed, after quiet discussion, to accept the Treaty signed by the Irish leaders and the British Government.

The Treaty fixes the relations that will exist between Great Britain and Ireland as parts of the Dominions under the British Crown.

Already the Treaty has had the sanction of the British Parliament, so now there should be no obstacle to Southern Ireland settling down in peace to show how it can govern itself in an orderly way, as other Dominions—Canada, Australia, New Zealand, and South Africa—are governed.

All that now remains is for the Imperial Parliament to ratify formally the Dail's new Constitution.

Though the two most prominent signers of the Treaty on the part of Ireland are dead—Mr. Arthur Griffith and Mr. Michael Collins—Ireland has shown that she can produce successors fully capable of carrying on their work and building up a State that will honourably represent the Irish character before the eyes of the world.

That complete success will crown their labours is one of the most deeply cherished desires of Englishmen, Scotsmen, and Welshmen, who have long hoped for the willing comradeship with the Irish race which now seems to be drawing nearer.

Pronunciations in This Paper

Aarhus	Or-hoos
Bettus-y-Coed	Bet-tus-e-ko-ed
Chevrotain	Shev-ro-tayn
Copernicus	Ko-per-ne-kuss
Foraminifera	Fo-ram-e-nif-e-rah
Hutia	Oo-te-ay
Magellanic	Maj-el-lan-ik

CHILDREN'S NEWSPAPER

OCTOBER 28 1922

Pendleton

WE have all been thrilled by brave tales of the sea in the last few months, and there is something noble beyond praise in the courage which leads men to risk their lives to rescue others.

Here is the story of a noble deed that seems to us well worth recalling now. It is the tale of a man who would not let others risk their lives for him. To him it did not seem just that others should die for him.

About twenty years ago an American ship near St. George's shoal was seen sinking. A Liverpool-ship was sent out, but soon the colours of the sinking ship were hauled down. The Liverpool ship saved them all; but when asked why the Cleopatra had hauled down its colours, Captain Pendleton said, "Because we had no boats, and did not want to imperil your lives in a hopeless attempt to save us."

There, indeed, was a clash of heroisms. It was a heroic thing for the Liverpool sailors to risk their lives; it was heroic and splendid, too, for Captain Pendleton to strike his flag so that others should not die for him.

It was like a good sailor, and good sailors are the same today as when Sir Humphrey Gilbert was last seen on his sinking ship with his Bible in his hand, "as near to Heaven by sea as by land." They have all the same fearless bearing toward death.

The very name of the ship, the Cleopatra, tells us of old days in which tyrants thought themselves great because at their lightest word their servants would go to death. How many a man died for Cleopatra's sake! But there is a nobler ambition of a man than to command the lives of others. It is the ambition of those who would rather live and die for others, who in the hour of peril set the others first. It is by the lives of such as these that the world is saved.

"A man must live!" This is the plea that is often heard. Deep down in us is the instinct which leads us to save ourselves. Something in Captain Pendleton's heart would be saying, "Let them come; it is your only chance; you must live."

But there was another voice louder than that. There is another instinct stronger even than the love of life. It is the voice which tells us that life is given us not for gain but for service.

It is the instinct which leads the doctor to go through a plague-stricken land, or a nurse to tend the sick however loathsome the disease. It sends a Livingstone into Africa, a Father Damien to the lepers, a Grenfell out among the deep-sea fishermen. It was that instinct which led Pendleton to strike his flag. We salute that flag with reverence.



THE EDITOR'S TABLE

Fleetway House, Farringdon Street, London

above the hidden waters of the ancient River Fleet, the cradle of the Journalism of the world



What It Comes To

THE Government has granted three-halfpence per head of the population to clear away slums—that is, to make the world fit to live in for all.

It is giving away more than £4 per head of the population on wars past, present, and to come—that is to say, on the accursed thing that makes life not fit to live for millions of people.

For This Relief Much Thanks

M. COUÉ gave a great joke to the world when he told people to fall asleep saying aloud to themselves a number of times, "Every day, in every respect, I get better and better."

An English psychologist has now come forward to assure us that this mental gymnastic is unnecessary. He knows of a case in which the French method "cured" a headache, but caused a sore throat! All we have to do is to think happy thoughts, to believe that we are getting better, to live as if we were the luckiest people in the world.

This will be a great relief to many sad and weary people who grind out every night, in the stillness and darkness of their bedrooms, "Every day, in every respect," and so on and so on, ad infinitum. Further, it will restore to the human mind something of its self-respect, for no one can really like to think he is a parrot.

Think cheerfully, hopefully, faithfully. We can all do that, even the greatest of us.

The Bright Old Lady

WE do not feel that we need apologise for quoting this letter from a reader in Kensington.

A lady came to tea yesterday. She is my favourite girl friend—65, bright-eyed, pink-cheeked, erect, and full of enthusiasm for life. She has stayed at house parties and yachting parties with half the royalties of Europe, and read enormously in French and English.

She loves her garden and the sea, but comes up to see pictures or listen to speeches, because she tries to understand the tendency of our times. Always she is asking questions and reading to try to understand the modern world.

The newspapers make her furious by their contradictions. She studies an article in one paper to find next day that a note appears in another paper denouncing every fact in it as fiction. "But," she said, "there's a little thing called the Children's Newspaper which gives you information."

She was talking to a fellow-guest when I overheard it, and her face was glowing with enthusiasm.

I find this more and more every day: an infinitude of tenderness is the chief gift and inheritance of all the truly great men. JOHN RUSKIN

Something Like a Name

WE have heard of a Welsh railway station whose name is long enough to run the length of a railway carriage, and a Cingalese student who has just passed the matriculation examination at London University rejoices in a name something like it.

It is not half a mile long, but it runs like this: Nanayakkaragodakandearachchige Harmanis de Silva Wijesekera. We hope he can spell it, and that he never forgets it.

Tip-Cat

A CHANGE has come over the youth of the nation in the last fifty years. And they are not so young as they were.

IRISH, we are told, is not always pronounced as spelt. So far as we have seen, it can't be.

SPINNING is becoming popular among women of leisure. They feel it is time they took a turn at something.

A LADY says she keeps chickens to kill time. Well, she can make up her mind that time will kill the chickens.



PETER PUCK
WANTS
TO KNOW
If tall girls go to
high schools

THE papers say the weather is trying. Trying to be better, let us hope.

THERE is a complaint that land work soils the hands. Still, it moulds the character.

THE average person is said to eat three times too much. His appetite is evidently above the average.

A DOCTOR suggests that women who want to smoke should have pipes. We suggest chimneys.

Where Ignorance Is Bliss

AS an instance of the simpleness of some of the people who live in rural solitude, a reader assures us that this is a real experience.

Nestling among green bushes was a little house where one could buy refreshments. On the wall inside was a little notice in black and white: "Ici on parle Français." Much surprised, our reader asked who spoke French there.

French? asked the lady of the house. "Yes," replied our reader. "That notice says, Here French is spoken."

The little lady with the sunburned cheeks gazed at the card on the wall, and said, "Bless me! Someone gave it me and said it meant God bless our happy home." And with nimble fingers she pulled it down, watching it burn with evident satisfaction.

It is never truly folly to be wise; but we are truly glad there may be bliss in ignorance.

How Common Sense Beat A B C

By the Editor of the Children's Encyclopedia

MANY sins have I. I made a boy at Peterborough sell his rabbit to buy my book. I remember a doctor's wife in Harley Street who told me that I kept her husband awake at night. I remember a teacher in Australia writing that I brought the children to his school half an hour before time that they might look at this book that happened to pass through my hands on its way from the heart of things to the utmost parts of the world.

Perhaps I must plead guilty, but, after all, it was not I who did this thing, but simply Common Sense. It was the spirit of Common Sense waking up at a tea-table one day that set the whole thing going; and from that day the Children's Encyclopedia has gone into over 800,000 homes and schools.

Why there was no C.E. before

It was Common Sense that showed the way. There had never been a children's encyclopedia before because it was obviously impossible to give a child looking out on the world with its first sense of wonder stirring the sort of encyclopedia that is made for grown-up people.

The world is one great whole, you see, and not a lot of fragments. We cram encyclopedias with facts all alphabetically arranged so that busy men can find them, but children do not drink in knowledge like that. The story of the world will not split up into As and Bs and XYZs. Think of the marvellous tale it is that we have to tell a child who comes into this world; and think of it split into alphabetical bits, so that the child is taken through little rooms of torture which lead him on from Ampersand to Aristotle, from Clinic to Cyclops, from Fenders to Fingers, from Mezzotint to Monkeys.

Very useful it all is to a busy man wanting dry facts in a hurry, but like another Spanish Inquisition is it to a child. He must see the story whole; he must see the unity of things.

Wisdom made Plain

So it was that the old alphabetical system forbade a children's encyclopedia; and so it was that Common Sense devised a better way. It thought out the plainest system of knowledge that it could devise, arranged so that a child could understand it, every subject beginning and continuing until it ends, with no waiting till the alphabet brings the subject round.

There are people who say that the Children's Encyclopedia is a wonderful book, but the fact is that it has become what it is because it is plain—or are they both the same thing? I do not know. This I do know—that children love things plain and simple, and here they have a book in which some of the wisest men who write have told us what they know in the plainest words they know. Common Sense has beaten A B C, and wisdom has made itself plain.

MYSTERY PLAY SURVIVAL FROM THE OLD WORLD

"The Great Comedy of the
Universe" at Salzburg

RICH MAN AND BEGGAR

By a Continental Correspondent

The revival of mystery plays in Salzburg, Austria, is a reminder that mysteries were the plays most in favour during the Middle Ages, generally with a display of pageantry such as we can hardly imagine.

Mixtures of simplicity and imagination, the shortest of these works amounted to 60,000 or 80,000 lines, and hundreds of characters were introduced, without mentioning the crowd. As there were no trained actors, the natives took the parts in the dramas, and some plays required so many people on the stage that there were hardly enough spectators left. So the citizens of neighbouring towns had to be invited to fill the seats!

The Three Floors

What simplicity in the staging, too! No single stage like that of our modern theatres was used, but three floors showed at once Heaven, Earth, and Hell.

The decoration of Heaven and Hell hardly ever varied, but the middle part of the stage, representing the Earth, was the most curious in its childishness.

A flat floor was crowded with little divisions, each having its meaning. A pool no larger than a tub would be the sea, a tree stood for a wood, and so on; and, as there was then no machinery to change the scene, the actor was supposed to be on a shore or in a forest when standing by the tank or by the tree!

Without being an exact reconstitution of such a show (which would probably be of no great interest to us) the attempt at Salzburg was a daring one.

Scene in the Church

It was in a church that Max Reinhardt erected. The spectators sat in the choir and transept; the stage, entirely strewn with red rags, lay in the apse. Some niches towering over it were reserved for brief apparitions of heavenly messengers, and others for the mechanics who handled the lights and projected luminous rays for the atmosphere to suit the poet. Other recesses held the organ, the orchestra, and the chorus.

Salzburg, with its background of a quiet country town, its many steeples recalling a long past of church history, and at the back the exceptionally beautiful high nave of its church, was the very place to stir an artist's fancy.

The play was called The Great Comedy of the Universe, and its theme was borrowed from a religious drama that Calderon wrote for Spain in the seventeenth century. The Earth is supposed to be a scene where men take the part given by God in the play of life. There were six chief characters—the King, the Rich Man, Wisdom, Beauty, the Peasant, and the Beggar.

The Play

The originality of the author is that he has given these characters modern cares, and has divided them into two opposite sides—that of possession and thrift, and that of misery and revolt. We see each character in the place that has been designed for him on Earth. Each has his own except the Beggar, who has been forgotten.

At last his anger bursts. Indifferent to the arguments of the Rich Man, he is going to kill them all. He brandishes his hatchet. But we are in a church, and the religious idea must triumph. The rebel hears the voice of Heaven; he grows quiet, he dives into a wood, from which he will come out purified, ready to help the Rich Man and assist him when Death comes to lead him to God, in whose presence all are equals.

EMPTY SWITZERLAND AND WHY

ALL lovers of Switzerland as the most beautiful part of the earth of its size will be sorry to think of it as deserted by the crowds that once refreshed themselves in its exquisite scenery year by year; and they will also be sorry for the reason why the crowds have not been there this year.

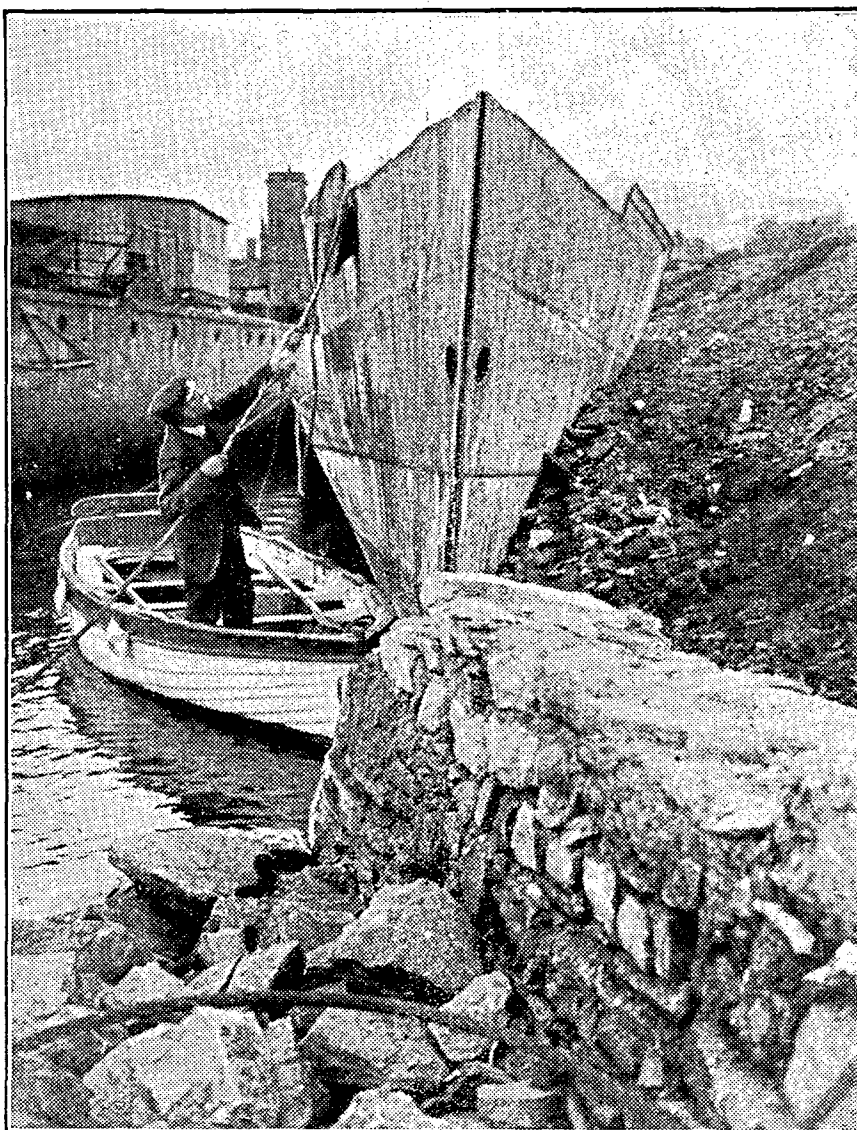
The Swiss have only themselves to blame for the world having turned its back on them. They have put up their prices till their customers have been repulsed. It was an exactly opposite way of doing business that made Switzerland

the playground of Europe. The visitor was welcomed by the Swiss people as well as charmed by the natural beauties of their land.

No doubt the lesson will be learned presently, both in Switzerland and elsewhere, that charging more for things than they are worth is fatal to business in the long run.

When the abnormally high prices have led, for a season or two, to weary waiting for customers who do not come, there will be a return to honest dealings and a revived prosperity.

OLD WARSHIPS FOR A NEW SEA-WALL



Obsolete warships are being put to a good use at Dartmouth, where, instead of being broken up, they are filled with rubble and placed in line to form a new sea-wall

NEWS FROM EVERYWHERE

The Mississippi valley now contains half the population of the United States.

The Bible has now been translated into 550 languages, of which twelve were added during the past year.

The rickshaw is said to be slowly disappearing in Japan. In five years the number in Tokio has fallen by 5000. There are still 147,000 in use.

We All Pay

Thirteen drunken people cost the taxes £1311 each last year, adding £17,000 to the burden of the nation.

An Unknown Belgian

A Belgian unknown soldier has been buried in the great Paris cemetery beneath the monument commemorating the Belgian dead.

Germany's Small Harvest

The cereal crops of Germany are reported as showing a great falling off this year—wheat 35 per cent less than last year, barley and oats 18 per cent less, and rye 21 per cent less.

Left-Handed Violinist

Eric Hunt, of the Hurlingham School of Music, who has just passed his second examination at the London College of Music, is a very rare example of a successful left-handed violinist.

There is to be a new bridge over the Forth at Alloa. It will cost £171,000.

A shopkeeper at Preston has been fined for selling alcohol under the label of an unfermented wine.

2888 words without a slip were telegraphed by a German woman in a telegraph operators' international contest at Berlin recently.

Savings Certificates

Up to the beginning of September the number of National Savings certificates sold was 591,913,000. Their value was £459,144,594.

£45,000 in a Day

On Alexandra Day £45,000 was collected in London for hospitals, enabling £6300 more to be paid over than was paid last year.

Three Bad Crows

Three crows having driven the song-birds from the grounds of White House, Washington, President Harding has had the crows disposed of.

The Longest Aerial

What is said to be the longest single wireless aerial in the world has been completed at a lumber camp in Oregon. It is strung between two huge trees and is 1015 feet long.

THE TURKISH PEACE EVERYTHING ARRANGED AROUND A TABLE

The Triumph of the British
General on the Spot

DARDANELLES TO BE KEPT OPEN

After weeks of discussion, during which an unnecessary war that nobody wanted seemed to tremble in the balance, a Treaty has been signed between the Allies and Turkey, and now there is a fair hope that the Eastern world will be able to get on with the peaceful labours that underlie future prosperity and happiness.

A great evil has been averted without much being done that will tend to unsettle the world. The Powers in the Old World, Great Britain and France, have not broken their friendship.

The Straits of the Dardanelles, between the Mediterranean and the Black Seas, have not been handed back for Turkey to hold them against the world.

Repairing a Mistake

There seems to be a clear hope that it is the world which will before long succeed to their guardianship, and that will be a better thing than that they should be controlled by any two or three nations, however enlightened.

Greece has lost her hold over lands which she clearly was not capable of controlling, and that is the repairing of a dangerous mistake.

On the other hand, Turkey has regained a footing in Europe which will cause uneasiness for some time, especially as her victory over Greece leaves her proud and confident, and may have revived an ambition that has been dormant for the last quarter of a century.

One unfortunate point has been that the changes made have not had the concurrence of Russia, the country that is more vitally concerned in them than any other country.

A Wise Man's Patience

The credit or discredit wrapped up in these doings has become so entangled in the party politics from which the C.N. stands aloof that we limit ourselves to saying that one reputation has been most worthily established. To General Harington, commanding the British Army holding the Straits, universal praise has been given and is abundantly due for the patience, wisdom, firmness, and strength of character he has shown in his dealings with the Turks.

Had there been a great war, and had General Harington brought our armies victoriously through another tragedy, he would have been voted £50,000, perhaps, by Parliament. If the man who "wins" a war receives a fortune from the State, what shall we give the man who wins a Peace?

SPOTS ON THE MOON

Seen in the Autumn

A writer has been talking of some spots on the moon which most of us have never seen and would like to see.

He says that at this time of year anyone looking through a weak telescope, or even a cardboard tube, can see little black specks moving across the face of the moon. What they are, however, no one who did not know would be at all likely to guess. They are flocks of birds, flying south to sunnier climes, that happen to fly across the moon-gazer's line of vision!

As many as seventy of such specks have been seen in an hour, and the writer explains that the sharp, clear specks represent birds flying high, and the more blurred ones birds at a height of only a few hundred feet.

Considering the small size of the moon's disc in comparison with the size of the sky, there must be amazingly large flocks of birds to enable so many to be seen as specks crossing the moon.

THE WONDER STATION

NEW YORK'S IMMENSE RAILWAY TERMINUS

Waiting Hall that Holds Thirty Thousand People

ROOF HIGHER THAN THE MONUMENT

New York has now the most wonderful railway station in the world.

Opened in 1871, the Grand Central Terminus was enlarged successively in 1884, in 1886, and in 1900. But it was still found to be inadequate for the immense work of a big city, and in 1903 it was decided to rebuild it entirely and make it the finest of all stations.

Plans were drawn up for a magnificent depot that should be adequate for all possible needs for many years to come, and at the same time it was decided to embody all the latest improvements.

The station is now finished, and it is undoubtedly one of the great sights of America. The new Grand Central Terminus, which has taken nineteen years to build, covers in all 79 acres. This is amazing when we remember that the new terminus of the London and South-Western Railway at Waterloo in London covers only about 25 acres.

Digging Out Five Million Tons

Fresh land had to be acquired for the erection of this enormous station, and three and a quarter million cubic yards of material, more than half of which was solid rock, had to be excavated.

Having dug out all this material—about five million tons in weight—the actual building began, and in the construction of the station 50,000 tons of structural steel were used and a million barrels of Portland cement, weighing 375 million pounds.

A striking feature of the new station is the great hall, which is 275 feet long, 120 feet wide, and 125 feet high. It holds 30,000 people.

In the main station the express and suburban levels are connected, not by stairways, but by sloping roads of easy gradient, and the offices of the railway are reached by two sets of lifts.

Platforms Free for Passengers

Subways are provided for luggage and mails, and all goods are transferred to or from the upper and lower levels by means of lifts. In this way the platforms are kept free for passengers and there is no obstruction by moving luggage, as is so common at British stations.

To prevent any possible danger from fire the terminus is equipped with 96 fire stations, and frequent fire drills of the staff are held.

Another striking feature of the new station is a series of terminal loops, which enable trains to enter on one side and run round the loops and out from the other side in one continuous journey.

The system of signalling is very elaborate. The suburban level of the station has four hundred levers and the express section 362. The signal system is largely automatic, and is provided with every safeguard against accident, the signals and switches being interlocked both mechanically and electrically.

Four Hundred Tons of Coal a Day

The station and all the buildings on the property are supplied with steam and hot water for warming and other services, and with electricity for power and light from two power stations.

The average coal consumption at these stations in winter will be 400 tons a day, and the daily load of the boilers during a cold month will average five million pounds of steam. The main power station has fourteen 600 horse-power boilers, and the auxiliary six boilers of 1,400 horse-power each.

The waiting rooms and great hall are heated and ventilated by air distributed by means of twelve electrical blowing fans with a total capacity of 6,18,000 cubic feet of air a minute.

HAS MONT BLANC GROWN SHORTER?

Curious Result of Recent Measurements

LOSS OF TEN FEET

Has Mont Blanc grown shorter? Some scientists think it has.

In any case, the recent careful measurement of the mountain's height shows it to be only 4807 metres, whereas previous measurements gave 4810 metres. This means that the mountain is apparently three metres, or about ten feet, less than it used to be.

On top of the mountain a great snow-cap at least a hundred feet thick rises into the clouds, and some authorities believe that the unusual heat during a part of the past summer has caused about ten feet of this snow to melt.

It is quite possible, though other authorities think the difference in the figures is due to the fact that the improved instruments used in recent measurements give greater accuracy.

CHANGING SUNDAY TO MONDAY

A Date Puzzle in Samoa

Time seems to most of us something altogether beyond our control. If it is Monday it is Monday, and nothing we can do could change it. That is how most of us think about time.

But in Samoa, the lovely Pacific island where Robert Louis Stevenson lived and died, and which is now divided between New Zealand and the United States, they are talking about making a change which would prove to all the world how time is merely a convenient arrangement, one of man's contrivances, to be altered as he pleases.

Between New Zealand and Samoa there runs an imaginary line, invented by the scientific men of Greenwich Observatory and elsewhere, which makes a day's difference in time. Thus, when it is Sunday in Samoa it is Monday in New Zealand, and so on.

This makes things awkward, so it was proposed recently to ask the scientists to make a little bulge in their line. They would agree to this, but then the Americans, who rule the other part of Samoa, objected, because if the Samoan date were the same as that of New Zealand it would be different from that of the United States!

So there is great discussion going on as to what should be done.

TOWN MOVED THREE MILES

Making Room for the Miners

Perhaps the very richest district in the whole United States is the famous "Iron Range" of Minnesota, north of Duluth, where the open pit iron mines are in operation.

Thriving villages grew up like mushrooms during the war years, when the steam shovels in this vicinity were digging out millions of dollars' worth of ore, and the mining town of Hibbing, with 15,000 population, was one of these.

About eighteen months ago, however, it was found that the ore body extended right under the town, and the Steel Corporation decided to move Hibbing out of the way, lock, stock, and barrel.

It cost over fifteen million dollars to do so, but the work is now complete, and Hibbing rests three miles away.

OVERDOING IT IN OHIO

Hotels for Birds

The little garden shelters for birds which in England are often simply a coconut shell hung from a tree have been elaborated by some American bird-lovers into palatial residences.

One that has been put up in the garden of a man living in Ohio has seven storeys. The roof has an elegant dome like a mosque, and beneath the dome is a square tower with a clock.

There are numbers of rooms, and it is said that the hotel is well patronised.

THREE IN A CAR

A Car Drive in Wales

By One of the Three

We were three who set out from Shrewsbury to see Wales. She of the young heart who drove the car; he who took care of us; and I who was taken care of by both and did nothing.

Within our allotted four days we were free to take this road or that, to go slowly or swiftly, to buy food where we could, to eat our meals when and where we would, and to sleep in such places as pleased us.

But we had an object—mountains.

"It's a flat country," said she.

"Wait," said he.

And that first morning she drove us swiftly through Shropshire's flatness; on a high road smooth and black and dull.

If you have not the mountain sense you will never understand why we all suddenly shouted together "Mountains, mountains!" as a tiny group of distant peaks outlined themselves against the clearing sky.

Country of Crooked Roads

We entered Wales at Chirk, bought our lunch at Corwen, and passed on to Bettws-y-Coed, along a road from which the hills rise green and wooded.

No road in Wales is ever straight or level for long, but constantly surprises by curving, by climbing steeply, falling gradually, and turning corners with exceeding abruptness. And the scenery is as changeable as the road.

We peeped at the lovely wooded valley of Bettws-y-Coed, and went on to Capel Curig and Pen-y-Gwryd, with Snowdon and his brother mountains in front, and the Llanberis Pass cleaving a way between them, with the higher crags hidden in white clouds.

Llanberis Pass took us into the heart of the mountains, rising the more rugged the higher we went, till there was something merciless in the dark, jagged masses towering above the roadway.

A Fussy Little Engine

Suddenly the hills drew back, and before us lay the lakes of Padarn and Peris, with Llanberis beyond. And so we came to the station for Snowdon, with its fussy little engine and bulky, awkward carriage that might have escaped from the White City.

First the railway journey through woods and fields, and then up and up till we seemed to stand in the centre of a huge theatre, with the little clanking train as the industrious scene-shifter; and in front of us the ever-ascending Snowdon, with the shadows of its clouds chasing sunlit patches over its sides.

It seemed a perfect world we looked down on from the summit—a big, broad-minded, smiling world! Though we had a sense of aloofness from it, yet we had a feeling that intangibly it was part of us.

From the top of Snowdon the sea drew us along to Cardigan Bay. Avoiding Llanberis town, we skirted the mountain southward to Beddgelert and the Aberglaslyn Pass, rich and beautiful.

Harlech's Far-Famed Castle

The pleasant town of Harlech, which in a large measure has lived up to its fine old castle, brought our first day to an end. Next morning we took the coast road to Barmouth. Words cannot describe the loveliness of the estuary where the River Mawddach meets the sea.

To Dolgelly by one side of the estuary and back by the other side, to Towyn and Aberdovey, and then to a wayside inn at Pennal, completed our second day.

Next morning we went inland as far as Machynlleth, and then back to the sea at proper and respectable Aberystwyth.

Our third night brought us to ancient Tewkesbury, and the fourth day across the Cotswolds to Woodstock, Oxford, and Henley, for it was in Wales that the mountains satisfied most fully the desires of our hearts.

GLUT OF FRUIT AND TOO MANY POTATOES

Better Distribution Wanted Throughout the Country

WHAT SHOULD BE DONE?

By Our Economic Correspondent

It has been a wonderful year for fruit and potatoes.

The trees in the orchards have bent with the weight of magnificent crops of plums and apples and pears.

At Spalding, in Lincolnshire, where they grow potatoes largely, a speech was made in which it was said that there was a surplus of two million and a quarter tons of potatoes in this country this year, and it was suggested that the growers might copy the example of the milkmen last March, when it was decided to withhold a portion of the supply from the market.

Potatoes for the Pigs

There was no reason, it was urged, why the farmers should not agree to feed potatoes to their pigs, or allow one-third of their supply of potatoes to rot on the ground.

We have had the same sort of story from the fruit-growers, who tell us that, owing to the enormous supply, the high railway rates, and the middlemen, it does not pay them to send all their fruit to market. As a consequence large crops have been left to rot.

A Question of Transport

We fear the truth is that we have learned better how to grow fruit and other produce than how to transport it.

First there are the dear railway rates, which stand between the farmers and the big populations of the towns. There is a very great difference between food in the orchard and food in the place where it can be bought by the would-be consumer. It is all-important that the cost of carrying should be reduced.

The lower the cost of carriage the more is carried and the better it is for everyone concerned, from the producer to the consumer. The railways seem to be killing trade just as they are killing railway travelling. It is with railway passengers as with fruit, and we see that, owing to the high fares charged, the number of passengers has fallen in a year by 200 million!

Cooperation Needed

Railway rates tell very heavily against potatoes. The potato may be described as an inferior bread. The nitrogen in it is not so much as in the case of the wheaten loaf, but it is, nevertheless, a splendid food. It ought to be made accessible at the cheapest possible price, and in our schools every girl should learn how many nice dishes can be prepared from this cheap vegetable.

It is not only railway rates that need reform if we are to make the best of our produce. We need a greater degree of cooperation in the marketing of fruit and vegetables, as in other things. There are too many middlemen.

Before the war Mr. Christopher Turnor, one of our greatest agricultural authorities, estimated that the profits of the middlemen in certain articles of food were as follows:

Mutton	27 per cent.
Beef	16½ per cent.
Milk	100 to 120 per cent.
Peas, Beans, Carrots	100 to 180 per cent.
Small Fruit	100 to 150 per cent.

It is too bad that the price of milk, peas, beans, carrots, and fruit should be doubled, or more than doubled, in the mere handling for market.

With regard to potatoes, there is another possibility of consumption, and that is that spirit can be manufactured from them to drive motors. This is an industry capable of very wide extension, and one which should help to render it absurd to suggest that a country like ours can produce too many potatoes.

THE WEEK IN HISTORY

DEATHLESS JOHN KEATS

Immortal Man's Fear that he had Failed

POET WHOSE FAME GOES ON INCREASING

Oct. 29. Bishop Hannington killed in Africa. 1885
30. Richard Brinsley Sheridan born at Dublin. 1751
31. Five Mile Act against Dissenters passed. 1665
Nov. 1. Sir Matthew Hale born at Alderley. 1609
2. Jenny Lind died near Malvern. 1887
3. Thirty Years' War ended. 1648
4. George Peabody died in London. 1869

John Keats is the saddest figure in the gallery of fine English poets.

His short life is overshadowed by tragedy. Most of the poets have been comfortable men, or, if not, their unhappiness has arisen out of weakness of character. John Keats alone was a man of genius who sank swiftly under ill-health.



John Keats

Chaucer was a jolly man; Spenser serene though disappointed; Shakespeare, Ben Jonson, and Dryden won assured positions; Milton's misfortunes came late in life; Pope's vicious waspishness did not spoil his success; Goldsmith, Cowper, Burns, Coleridge, Shelley, and Byron, if unhappy, were so because of flaws in character or temperament; Wordsworth, Tennyson, and Browning lived long and prosperously. Only John Keats died through sheer ill-health with half his genius unrevealed.

His story can be told in a few lines. He was born in London on October 31, 1795, the son of a livery-stable keeper, who died when the boy was a child and left him a slender competence. He had an English education only, though his thoughts ran riot among the imagery of classical poetry. He began to study as a surgeon, but his health failed, and after years of struggle against consumption he died at 25, and was buried in Rome, fearing that he had failed and that his "name was writ in water."

Inscribed in the Temple of Fame

That fear was wholly unwarranted, for his name is engraved indelibly in the Temple of Fame.

Keats published three volumes of verse in 1817, 1818, and 1820. The first contained some fine sonnets. In "Sleep and Poetry" it had a sharp attack on poetry of the school of Pope. And it was dedicated to Leigh Hunt, which was enough to cause one set of critics to slaughter the book, for Hunt was an outspoken Radical.

The second volume, Endymion, was an instance of the luxuriant imagination of youth fascinated by the poetic fancies of ancient Greece. It had in it ample proof that the author was a poet of rare promise; but it was rudely received by some critics, hostile to all who differed from them in opinion.

The Song Unfinished

The third volume, containing stories and lyrical pieces, some of which had already appeared in serial publications, with the fine fragment Hyperion, proved to all who were not blind to beauty and deaf to melody that here was a poet of great delicacy, charm, and power.

But Keats was now slowly dying, having shown how great he might have been if he had lived until his genius had fully matured. Now his work stands like a fine piece of sculpture only half perfected; or like a lovely song unfinished. As his friend Shelley wrote:

Death feeds on his mute voice,
And laughs at our despair.

During the century that has passed his fame has constantly increased, and with its increase the tragedy of his early death has been more deeply felt.

RUBBER WINDOWS

No More Broken Panes

ARE WE ON THE EVE OF A REVOLUTION?

Rubber as transparent as glass and as elastic and non-breakable as ordinary rubber is the latest development in the rubber industry.

Chemists and inventors have long been trying to produce such a substance, and now we are told they have succeeded, the invention being British. No details are forthcoming, as the process is being kept very secret, but the developments and possibilities of such an invention are endless.

Boys will be able to play ball without fear of broken windows, for should the ball bounce against a rubber pane the pane would simply be pushed in or out and then return at once to its original place undamaged.

There would be no more cut faces through broken wind screens on motor-cars or broken windows in railway carriages, for missiles striking these might tear but would not splinter them.

A Ball Like a Soap Bubble

Overshoes and bathing caps would be practically invisible if made of the transparent rubber, a ball would appear like a soap bubble, and toys such as dolls' houses could be fitted with windows that would be without the danger of glass or celluloid.

No doubt many scientific instruments would find the new rubber a splendid substitute for glass, and it is even suggested that enormous objective pieces for giant telescopes could be made more readily from transparent rubber than from glass.

Spectacles and eye-glasses could fall off any number of times without being cracked, and shopkeepers would find rubber windows a fine substitute for plate-glass, provided the transparency were as clear.

Rubber has already transformed the world once by means of the tyre that has made motor and cycle traffic possible; and now, if this new invention can be developed and put on a commercial basis, it may bring about still another revolution.

CLEVERNESS IN DOING WRONG

A Torpedo that Turns Round

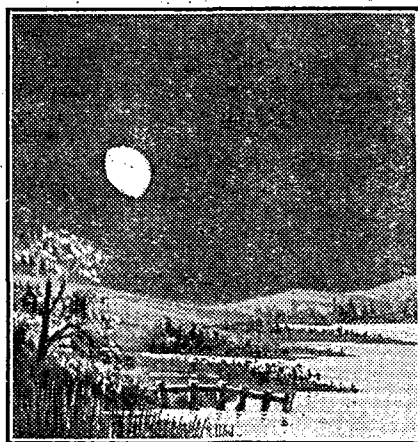
The ingenuity of the inventors of means of destruction seems quite inexhaustible.

The latest device reported is a torpedo that will turn rapidly at right angles to its first course and rush upon a ship it is chasing.

It is launched upon its watery journey from a seaplane that dips down to within a few feet of the sea before it releases the bolt of death.

If half the cleverness wasted on ill-doing were used in real helpfulness, mankind might live in a paradise of ease.

THE MOON NEXT WEEK



The moon at 7 p.m., Greenwich time, on October 31

C.N. QUESTION BOX

Little Puzzles in Natural History

Answered by Our Natural Historian

All questions must be asked on postcards, and not more than one question on each card. Name and address must always be given.

Do Mother Hedgehogs Feed Their Babies like Pigs?

Yes; hedgehogs and pigs, and all the other mammals, feed their young on milk.

Where can Foraminifera be Obtained?

The majority belong to the sea, where they are found at all depths, but some species are obtainable in fresh water.

What is Sand?

Sand is composed of the tiny particles to which rocks are finally reduced, and consists very largely of grains of quartz.

What Causes Dogs to Run on Three Legs?

Generally the cause is lameness, which may arise from an injury to a paw or from rheumatism or temporary stiffness.

Is There a Smooth-Haired Breed of Irish Terrier?

We believe not. The true Irish terrier should have hard, rough, wiry, but perfectly straight, hair.

How Does the Corncrake Make Its Strange Sound?

The creaking note of the corncrake is its call, and proceeds from its vocal organs, as do the notes of song birds.

Can Fishes Climb?

Many sprawl and hop about on land, with their tails touching water, but the climbing perch ascends trees, using its fins as legs.

Which is the Oldest Type of Horse?

The Arab horse is said to be the oldest of existing domestic breeds. Its records can be traced back as an aristocrat of the horse tribe for 1300 years.

How Long do Robins Live?

It is unsafe to speak with certainty of birds which cannot be positively identified year after year, but 15 years seems about the life chance of a fortunate robin.

Is Sow-Thistle Good for Human Food?

Although sow-thistle is a much disliked weed in British soil, it is an addition to food abroad. The tender tops and the leaves are used, but not the stalk.

Which is the Stronger, the Circulation of the Blood or of Sap in a Tree?

The sap in a vine circulates with five times the force of blood through the most important blood vessel in a horse's leg.

Does Any Creature Besides a Cow Chew the Cud?

There is an important group of such animals. They are called Ruminants, and include all the cattle, deer, chevrotains, camels, antelopes, and giraffes.

What is the Highest Temperature at Which a Cat Can Live?

It would be cruel to test the question artificially. Cats do not like excessive heat; in tropical countries they hide during the hottest hours of the day and hunt by night.

Do Any of the Great Apes Walk Like Men?

The gorilla, orang, and chimpanzee all use their hands and arms as supports in walking. The gibbons totter along with their arms over their heads, unsteadily, but upright.

What is a Hutia?

Hutias are rodents, animals which gnaw. They are like very large rats, measuring 22 inches and more from the nose to the root of the tail. They are peculiar to the New World.

Newspaper Notes and Queries

What is Heart Wood? The wood in the centre of a tree trunk.

What are Combers? This is a nautical term for large seas, or breakers.

What is Ivory Black? An intensely black colouring manufactured by burning waste cuttings of ivory or bone.

What is Oolite? A rock made up of small grains of carbonate of lime and resembling the hard roe of a fish.

What is the Eye of a Furnace? In glass manufacture this is a recess containing fuel in the middle of a furnace.

LONDON IN A LUNAR CRATER

GIANT MOUNTAIN THAT APPEARS A SPECK

How to Watch the Moon Through a Pair of Field-Glasses

BIG PEAKS AND LITTLE PEAKS

By Our Astronomical Correspondent

The magnificent crater of Copernicus, one of the finest on the Moon, may be easily seen with field-glasses next Monday evening.

Our satellite being then nine days old, sunrise will occur over Copernicus on that day. In 29½ days the Moon will again be nine days old, and the Sun will again be rising on the heights of the great crater of Copernicus, and so on for every succeeding 29½ days.

This event can be seen better on some occasions than on others, for whereas the gradual sunrise, spread over some hours, may occur during the evening hours at one time, at another most of the sunrise would take place during the preceding daylight.

Light-Tipped Mountain Tops

In this case the semicircle of light-tipped mountain tops projecting, as it were, from the Moon would not be seen; instead, the whole of the immense crater would appear lit up, except for the deep shadows over the eastern slopes of the mountains.

So we see that, in any case, this splendid lunar feature may be seen just at this time, provided that the glasses are resting steadily against some support, and are held for two or three minutes, until the eye becomes adapted to the new conditions of light.

Thus Copernicus may easily be found. It will be slightly north of midway along the left-hand edge of the Moon on Monday next. This edge is the terminator, and it represents the region where the Sun is rising on the Moon.

The great crater will be seen to stand alone, the innumerable minute craters that surround it being quite invisible without a powerful telescope.

The Big Black Shadow

The sides of its circular wall of mountains that slope toward the sunlit half of the Moon will appear intensely bright, while the opposite sides will be black.

If the observer is fortunate enough to get a view of Copernicus before its great central floor is lit up, the effect of the sunlight on the encircling mountain tops will be very striking.

The dark central area should now be watched closely for a while, until in the centre a point of light will be detected—if the glasses are good—and in the course of half an hour or so it will be seen to increase in size. This is the sunlight catching the tops of a large central mass about 2400 feet above the crater floor.

Meanwhile, the sunlight will have extended down the slopes of the mountainous semicircle on the left, and on reaching the foot will begin to light up the floor of the crater. The central mass will cast a shadow to the left.

A Speck on the Moon

There are two main peaks and several smaller ones to this central mountain, which covers an area approximately the size of London, and we get an idea of the space that our great city would appear to occupy on the Moon—just a speck through powerful field-glasses.

It would go comfortably into the middle of the crater of Copernicus and leave a fairly level plain, varying between 7 and 10 miles wide, all round it to allow for suburban growth.

This plain is dotted with hillocks, while all around rises in grand terraces a great ring of mountains to a height of 11,000 feet, with some peaks 12,000 feet.

The entire width across this great crater from summit to summit varies between 56 and 60 miles. G. F. M.

THE HOUSE OF SILENCE

A School Story
With a Mystery

Told by T. C. Bridges,
the C.N. Storyteller

CHAPTER 23

A Stern Chase

THE threat had hardly left Jimmy Clayton's lips before he realised that he had been foolish to make it.

For in a flash all the three bullies were on their feet; and Hogan, always the quickest of the three, was dashing straight at him.

"Hold him! Don't let him get away!" Jimmy heard Arden cry fiercely; and Hogan's hands were grabbing at his collar as he spun round and bolted out of the door.

There was no time to slam it. Hogan was too near. There was nothing for it but to run, and not even during the hardly fought game from which he had just come had Jimmy run faster.

He had no one to help him. Bob Dane was still changing; Ray had been taken to the sick room; the rest of his chums were probably in the Lower Fourth class-room, but that Jimmy could not reach, for his pursuers were between him and it. The only thing left was to make for the stairs leading to the side entrance and trust to his speed to get away into the quadrangle.

The one thing he must avoid was being caught. Jimmy was no fool, and he knew what the consequences would be if the bullies once got hold of him. They would drag him into one of the empty dormitories or class-rooms, and there try to force him to swear silence. And the methods they would use—well, Jimmy had been long enough at Charminster to know something of these, and he certainly did not want them tried upon himself.

The pace at which he went down the corridor was terrific. He reached the head of the stairs just a step ahead of Hogan, caught the corner post of the banister, swung himself round, and went down the stone steps at breakneck speed.

Something whizzed past his head and thudded against the wall. It was an old football boot hurled by Bulmer. It only made Jimmy run the faster, and when he reached the bottom he had gained a bit.

He spun round the corner below, flashed along a tiled passage, and next instant was outside in the cold grey of the late afternoon.

This way out had led him not into the main quadrangle, but a side one known as New Court. Jimmy had half hoped to see other boys about, but a drizzle had begun to fall and there was not a soul within sight. He saw that he had to depend entirely upon himself.

There was a passage opposite, leading past the gymnasium to the five courts. He made for it, dashed through it, and when he reached the end suddenly whirled to the right and flattened himself behind a buttress of one of the five courts.

His ruse worked, for Hogan, fully supposing that his quarry would turn to the left and make for the open quadrangle, went that way.

Instantly Jimmy was off again, keeping to the right, and making for the old Well Court. For a moment he believed that he had tricked the lot, but unfortunately the crunch of his boots on the gravel betrayed him, and next moment he heard Arden's voice:

"Not that way, Hogan! He's gone to the right." Then he heard Arden's pounding steps behind him.

Jimmy's heart sank. His plan had been to go for the old well, climb down the drain, and so reach the secret passage. If he could have done that he knew he would have been able to puzzle his pursuers completely. Now it was too late. He would not have time.

Worse still, he had got himself into a blind alley from which there

was no escape. Yet he kept on at top speed, hoping against hope, and racking his brains for some way out.

The Well Court was unlighted and full of thick mist. There might be some sort of chance of dodging the bullies by hiding. But Arden was sprinting, and Hogan was close behind him, while Jimmy, tired already with his desperate exertions in the football field, felt his powers beginning to fail.

"It's all right," he heard Arden's voice close behind. "It's all right, Hogan. The little brute can't get away. We've got him when we want him."

CHAPTER 24

The Man in the Mackintosh

JIMMY felt fairly desperate. For the moment he was tempted to turn and go for Arden with all his might. He would have done it without hesitation had Arden been alone. But Hogan was only just behind him, and the fat, hard-fisted Bulmer quite close up. The odds were too great.

It is always when one is in the tightest place that the brain works most rapidly, and Jimmy's was no exception to this rule. All in a flash he remembered the bit of old wall at the end of the yard.

It was not nearly so high as the rest, and its surface was rough and broken. There was just a chance he might get over, though he had never before tried it. He ran straight for it, then collecting every atom of strength he had left, made a frantic jump.

Joy! His clutching fingers got a good hold at the top, and he dragged himself up just in the nick of time to escape Arden's wild grab.

"Hogan—quick—give me a back! The brat's on the wall," cried Arden.

But long before Hogan could do as Arden had ordered, Jimmy had let himself down and was hanging by his finger-tips on the far side. Taking his courage in both hands, he dropped into the dry moat.

The thick nettles and grass broke his fall, and, though he was pretty badly stung, he reached the bottom little the worse. Up above he heard Arden scrambling wildly to reach the top, but Jimmy did not wait. In a twinkling he was in the old overflow passage running out of the well, and from that into Ray's secret passage. Three minutes later he was safe in Ray's cellar.

The place was almost pitch dark, and Jimmy dropped on Ray's bench and sat there, panting, until he had got his breath again. Soon he felt all right, and his lips widened in a grin.

"A close call," he said to himself, "but, my word, it was worth it. I wonder if they came over the wall after me. I only hope they did, and had to walk all the way back."

He began fumbling in his pocket for matches.

There was no direct communication between Ray's cellar and Jimmy's kitchen. To get from one to the other it was necessary to go up the steps into the long passage, then through the door and down the half flight into the kitchen. Jimmy could not find a match, but he remembered that there was a box in his own place.

He looked at his watch, which had a luminous dial.

"Just time for a bit of work before tea," he said to himself. "And, anyhow, I'm not going back just yet. Those beggars will be waiting for me near the school gates, so I'll have to leave it till the last minute."

A new thought came into his mind, and his grin broadened.

"I can do better than that. I can get back by the passage and the old wall, and leave Arden and

Co. to wait in the rain for a good hour. What a gorgeous rag! And won't they be mystified when they find me back in Hall, and don't know how on earth I got there!"

It was a situation which appealed to Jimmy's sense of humour, and he resolved to act upon it.

He found his way up the dark steps, and then he quietly unbolted the door at the top, got into the passage, made sure that all was clear, and stepped out. He closed the door behind him, found the other door, and a minute later was safe in his own place.

Jimmy had taken the precaution to rig a curtain made of some old sacking across the window, of his kitchen, so that when he had a light inside no one could see it from outside the house. Now he went to the window to draw the curtain, but, just as he was going to do so, a sound made him stop short.

The sound was of steps. Someone was moving outside, and Jimmy's heart beat hard.

For the moment he quite believed that in some way Arden and Co. had got on his track and were hunting for him round the house. He ducked down so that his eyes were level with the sill, and waited. It was not yet quite dark outside, and next moment he saw a figure coming past the window.

It was not Arden or one of his pals. This was a man—a big man wearing a long mackintosh. He had a soft felt hat on his head, and under this showed a quantity of thick curly hair.

"Slogger!" gasped Jimmy. "It's Slogger Flower. What on earth is he doing here?"

The man had gone in a moment and had disappeared among the trees. Jimmy, forgetting all about his previous plans, pushed the window softly up, slipped through, closed it again, then went rapidly off on the track of the master.

But by the time that Jimmy was free of the thick shrubbery which surrounded the old house he could no longer see a sign of Slogger. Not much wonder, either, for it was now nearly dark and raining quite hard.

So Jimmy made straight for the moat, crawled back through the conduit, and, without much difficulty, climbed the chain of the old well, and so found his way back to his class-room.

CHAPTER 25

The Third Theft

THE very first person Jimmy ran into was Bob Dane.

"How's Ray Cartwright?" he asked. "Have you heard yet?"

"Yes; just got word from the Matron. He's doing fine. He was

only stunned, and got one tooth knocked out. She says he will be out and about again tomorrow."

"Topping!" said Jimmy, in real delight. Then he laughed outright. "What a sell for Arden and Hogan!"

"How do you mean?" questioned Bob.

"Mean! Why you must be blind!" said Jimmy loudly—so loudly that all the boys in the room could hear. "Couldn't you see that Hogan charged Ray on purpose—that he meant to hurt him?"

A dozen boys did hear, among them Arden's fag and toady, Ferguson. He spoke up.

"I say, that's a pretty nice thing to say, Clayton," he remarked. "I don't believe a word of it. Hogan wouldn't do such a thing."

Jimmy at once spun round and faced Ferguson.

"Of course you'd say so!" he retorted. "You're bound to stick up for your pals. But I can tell you I'm not talking through my hat. And I'll tell you why." He paused. By this time every boy in the room was listening. "As it happens," went on Jimmy, "I heard Arden boasting about it. He said, 'You did that jolly neatly, Hogan. That brat ought to be out of the running for the rest of term. You're safe for the scholarship now.'"

There was a gasp all round.

"You heard that, Clayton?"

exclaimed Guise.

"Give you my word I did, Guise. I've repeated exactly what Arden said."

Guise whistled.

"Well, if that isn't the limit!"

"A bit beyond it," said another boy called Bailey, and his tone was distinctly grim. "If you ask me, it's about the dirtiest trick I've ever heard of."

Ferguson broke in again.

"You've only got Clayton's word for it," he said, with a sneer.

"Well, I'd a sight sooner take his word than yours," cut in Guise curtly.

"So would I!" "So would I!" broke in a dozen other voices; and Ferguson, seeing he had no one to back him, subsided and slipped quietly out of the room.

Meantime everyone was round Jimmy, all talking hard and asking questions. Jimmy told them how he had gone into the change room and what he had overheard. He said they had chased him and that he had dodged them and got away, but naturally did not explain how or where he had gone.

The Fourth was thoroughly stirred up, and various suggestions were made for putting Arden and Co. into Coventry. But Jimmy could plainly see that even now a certain following remained to the bullies. Some of the smaller boys were scared of them; others were attracted to them by the fact that Arden and Bulmer had plenty of money and spent it freely.

In the middle of the discussion the tea-bell rang and everyone bolted. Jimmy and Bob Dane were walking together into the dining hall when they ran into a boy called Knowles—a small, clever fellow in a higher form, but who was in B dormitory.

"I say, you chaps, have you heard the news?" he cried. "There's been another robbery!"

"Another robbery!" exclaimed Bob Dane.

"Yes; someone has been into Beaky Sharp's room, and bagged his gold watch and chain, and some money too!"

"Well, if that isn't the limit!" said Bob. "But there's one thing; they can't say it's Ray this time."

But Jimmy said nothing. He felt as if someone had hit him a blow on the head. Before his mind's eye was the picture of Slogger stealing through the wet shrubbery past the empty house.

TO BE CONTINUED

Who Was He?

A Great Sea Captain

IN the great days of Queen Elizabeth, when Englishmen were making themselves masters of the sea and laying the foundations of that far-flung empire that has become the wonder of the world, a fatherless boy who showed signs of great spirit and courage was sent to sea for his first voyage.

This was to the Guinea coast of Africa, and from that time forward he lived almost continuously on the sea and sailed to many parts of the world, gaining an experience of seamanship that stood him in good stead later when he became one of the foremost leaders in driving back the invader from his native shores.

In those days men thought much about the possibility of reaching China by a north-west passage, and this daring seaman was fired by the idea of being the discoverer of such a passage.

He made three voyages for this purpose, sailing past Greenland and exploring the North American coast, from which he returned with an ore that was said to contain much gold.

On a second expedition he obtained two hundred tons of the ore, and there was much rejoicing when he brought this home. Men, no doubt, thought a great El Dorado had been found; and the ore, carefully guarded, was lodged in Bristol Castle and the Tower of London until it could be tested. Great was the disappointment when, on placing the ore in the furnace, the gold was not forthcoming.

A third expedition was fitted out, but more attention was given to the discovery of gold than to the discovery of the North-West Passage, and when the captain returned home without gold he became unpopular.

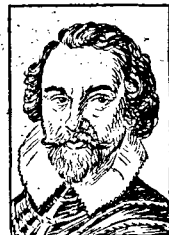
Later he joined Drake as vice-admiral on an expedition to the West Indies, where he greatly distinguished himself by his bravery and daring.

Returning to England, he took command of a ship in the fierce fight against the Spanish Armada, and shared the glory of victory with Drake and Hawkins. For his part in the victory he was knighted.

A year or two afterward we find him living in Yorkshire, where he married for the second time, but he loved the sea and was soon out on it again, harrying the Spaniards. He captured one of their treasure ships, and then one day while leading a party of his men on shore he was wounded, and the medical treatment was so unskilful that soon after arriving in England he died.

Part of his body was buried at Plymouth and part of it in London.

We honour his name today. Here is his portrait. Who was he?



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October 28, 1922

The Children's Newspaper

11



God's in His Heaven, All's Right With the World



D! MERRYMAN

"WHAT are you going to do about it, sir?" demanded the irate tenant of his landlord. "The walls of my house are all bulging outward."

"Bulging outward, are they?" returned the landlord. "Then that makes the house bigger; I must raise your rent."

Arithmetical Puzzle

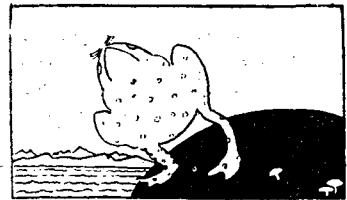
JACK'S uncle was talking to him about ages.

"Well, I am three times as old as you," said Jack's uncle, "but one day I shall be only twice as old."

How old were they, and in how many years' time will Jack's uncle be twice Jack's age? *Answer next week*

WHY is a telescope like time? Because it brings distant things near.

The Zoo That Never Was



The What?

It isn't a toad, and it isn't a frog, It isn't a lizard, an eel, or a dog. Don't you think it's a terrible, terrible shame To go through your whole life without having a name?

Do You Know

THAT Mohammed did not write the Koran, for he was unable to write? He probably dictated it in instalments to some scribe, or scribes, who could write.

That tortoises do not eat black-beetles? Many people keep a tortoise because they think it will rid their kitchens of beetles.

That the Egyptian monument, called Cleopatra's Needle, which stands on the Thames Embankment in London was not erected by or in honour of Cleopatra? It should be called after Thothmes, the monarch who first set it up.

That people often speak of calves-foot jelly? What they mean is calf's-foot jelly.

Winter is Coming

WINTER comes with hail and storm, Red fire roaring and ingle warm.

School Howlers



Lost in the Wash

"THE saddest thing that ever happened to King John," wrote a boy, "was to lose his crown in the laundry."

WHAT is the most dangerous kind of assassin? A man who takes life cheerfully.

How do we know that Henry V's archers were all artists? Because they drew their bows.

When Jumbo Had a Cold



"A MUSTARD plaster's on my chest," In doubt poor Jumbo cried. "Have I to swallow this old bag To keep me warm inside?"

So Now We Know

THE old lady sat at her cottage window watching the traffic pass through the village, which was on the main road from London. For the third time that day a car broke down within view.

"Well, well, dear," she said to her daughter, "here's another motor-car broken down. It must be those raw materials they use in the factories."

Word-Coining

FROM the letters S M T A E make four different words, each word containing all the letters once only. Can you do this? *Solution next week*

Washing-Day

SING a song of washing-day!

Lots of waiting clo'es, Looking, oh, so worn and grey, Oh, so full of woes! Half the water in the tub Must be tears, I'm sure, As they sob, "It's rub-a-dub—Washing-day once more!"

Sing a song of washing-day,

Clo'es hung out to dry, Flitter-fluttering away, Waving to the sky. "Look at us!" each garment says. "Aren't we white as snow? When it's over washing-day's Not so bad, you know!"

Candid

THE young man had just finished singing.

"Yours is a wonderful voice, old chap," said his best friend.

The young man beamed with pleasure.

"Do you really think that?" he asked.

"Rather!" was the enthusiastic reply, "otherwise it would have worn out years ago."

The Busy Bee

THE question old, "How doth the busy bee Improve each shining hour?" we'll hear no more;

A naturalist has just announced that she

Works three hours only out of twenty-four.

ANSWERS TO LAST WEEK'S PUZZLES

Queer Arithmetic

£ s. d.
54 3 9
2
103 7 6

Do You Live Here? Southend
What Am I? Range, anger

Jacko Feeds the Cat

JACKO's life on board ship was a short and a merry one.

For a whole day he hid in the men's quarters, and nobody guessed he was there. But at last the poor lad began to feel hungry, and when he could stand it no longer he crept out to see what he could find.

He didn't find much, for the men had had their dinner and it was all cleared away. But there was a plate of pieces standing on the deserted table, and, thinking that better than nothing, Jacko picked it up and ran off with it to his hiding-place.

He had no sooner squatted down than up came a black cat.

"Hallo, Blackie!" said Jacko, stuffing a lump of bread into his mouth.

"Miaul!" said the cat, and she lifted a paw and put it on Jacko's knee.

"What's the matter?" Jacko asked. "You aren't hungry, are you? Haven't you had your dinner?"

"Miaul!" said the cat again, and this time it was a very angry one. Jacko burst out laughing.

"All right! Keep your wool on!" he said. "You shall have a bit of mine—"

"And then he stopped. "Pon my word!" he exclaimed. "No wonder the little beggar's wild—it's *her* dinner that I've got!" And he laughed more than ever.

By this time the cat was on his shoulder.

"Never mind, Pussy," Jacko said, "we'll share it. Here's



"Here's a bit for you, Pussy," said Jacko

a bit for you. I can't give you the lot; you aren't half as hungry as I am."

In his excitement he had raised his voice. The next minute there was a shout.

Jacko started up; but before he could move a hand clapped him on the shoulder and held him fast.

"You young rascal!" cried a voice that he had heard before.

"So it was you I caught sight of, was it?"

Jacko daren't say a word; he was wondering what they were going to do with him.

"Look at this, sir!" the sailor called out, as the captain came along. "A stowaway—a regular young rascal by his looks!"

The captain—he was a jolly, red-faced man—looked at Jacko and laughed.

"Hungry?" he asked.

"Not half," said Jacko, springing up.

"Then you'd better come and have something to eat," said the captain. And to the sailor's astonishment he took hold of Jacko's arm and walked him off to his cabin.

Jacko beamed. He thought his fortune was made.

"I'm going to be a sailor!" he kept saying to himself. "I'm going round the world!"

But he wasn't, as he soon found out. They were all very kind to him, but at the first port they landed at Master Jacko was put ashore, where he found his father waiting for him, alas! with a big stick in his hand.

Ici on Parle Français



Le parc La gymnastique Le laquais

Les daims errent dans ce parc

Les fillettes font la gymnastique

Le laquais attend devant la voiture



Le maître d'hôtel Le zèbre La foule

Adressons-nous au maître d'hôtel

Le zèbre est rarement apprivoisé

Que fait cette foule d'enfants?

Those Who Come and Those Who Go

How many people are born in your town, and how many die? Here are the figures for five weeks in 12 towns.

TOWN	BIRTHS	DEATHS
1922 1921 1922 1921		
London	9012 9424	3824 4737
Manchester	1470 1705	758 773
Sheffield	968 1126	440 479
Belfast	958 1009	470 448
Bristol	687 744	240 362
Newcastle	676 754	271 325
Nottingham	518 558	235 252
Cardiff	416 482	181 186
Norwich	229 229	93 107
Wigan	217 242	84 91
Exeter	121 102	57 55
Hastings	74 76	52 58

The five weeks are up to Sept. 30, 1922

Tales Before Bedtime

Red Riding Hood

ANNE went into the wood all by herself to gather blackberries. She carried a basket and wore a blue frock and a red coat, and she pretended she was Red Riding Hood.

"Only there isn't any grandmother's cottage and there isn't any wolf," she thought, and at that very moment her heart gave a big jump. A wolf was coming through the wood!

Anne was quite sure it was a wolf because it was so big, and it was grey and had its ears pricked up just like the wolves she had seen at the Zoo.

"Oh dear! Oh dear!" she cried. "I am all by myself and he'll eat me up!"

But the wolf did not eat her up. He trotted quietly up to her and began to lick her hand. A broken chain was round his neck and he looked hungry and miserable.

Still very frightened, Anne began to run, but the wolf ran, too, with his red tongue hanging out in a most alarming way.

Then Anne saw a cottage in the wood and she knocked at the door. A woman opened it, and directly she saw Anne and the wolf she cried:

"Bob! Bob! Come quickly. The dog's found!"

"Oh, please, isn't he a wolf?" asked Anne.

"A wolf? Bless you, no," said Bob. "He's a wolf-hound and worth pounds and pounds. He was stolen from the big house a week ago, and we've searched the country for miles round. Good old Petroff! So you broke your chain and got away from the thieves like a clever doggie, did you?"

Anne's wolf barked and wagged his tail; and the woman gave them both cakes and milk before Bob led him away to the big house.

Anne ran home, too, and told everyone all about her adventure.

The next day she had a splendid surprise. A car came hum-



Anne was sure it was a wolf

ming up to the door, and in it sat the wolf and his master, a big man in a fur coat.

"Petroff's brought a present for the little girl who found him in the wood," said the big man, and he handed Anne a box.

Inside it was a doll almost as big as a baby, dressed exactly like Red Riding Hood.

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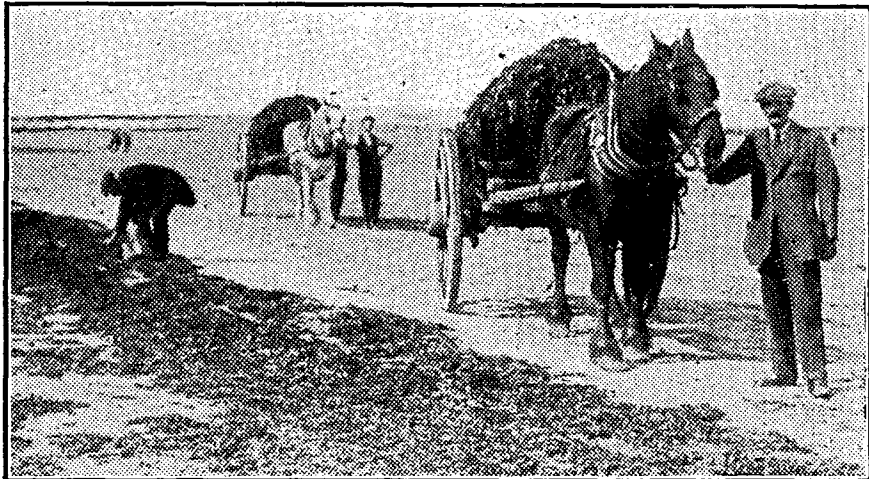
CHILDREN'S NEWSPAPER

October 28, 1922

Every Thursday, 2d.

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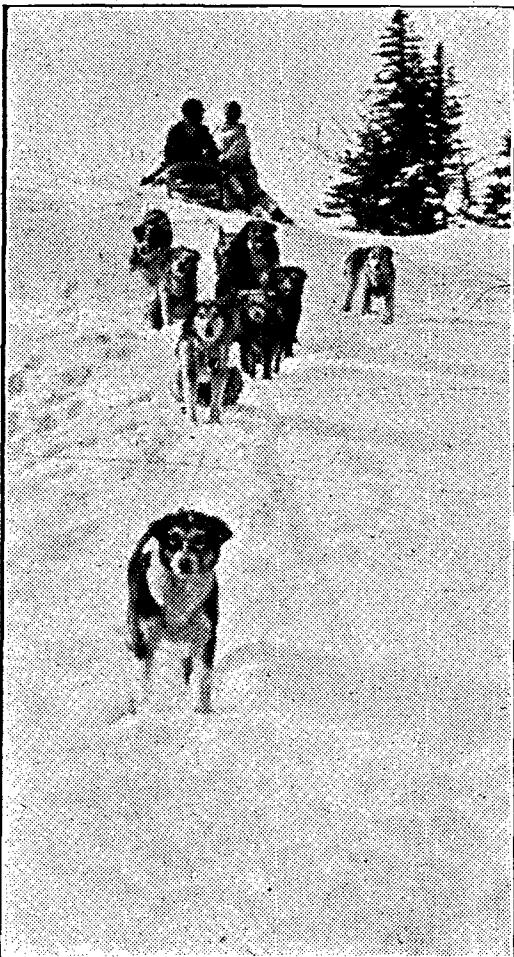
SEAWEED FOR THE LAND • HERRINGS IN A RIVER • CHINESE NURSEMAID



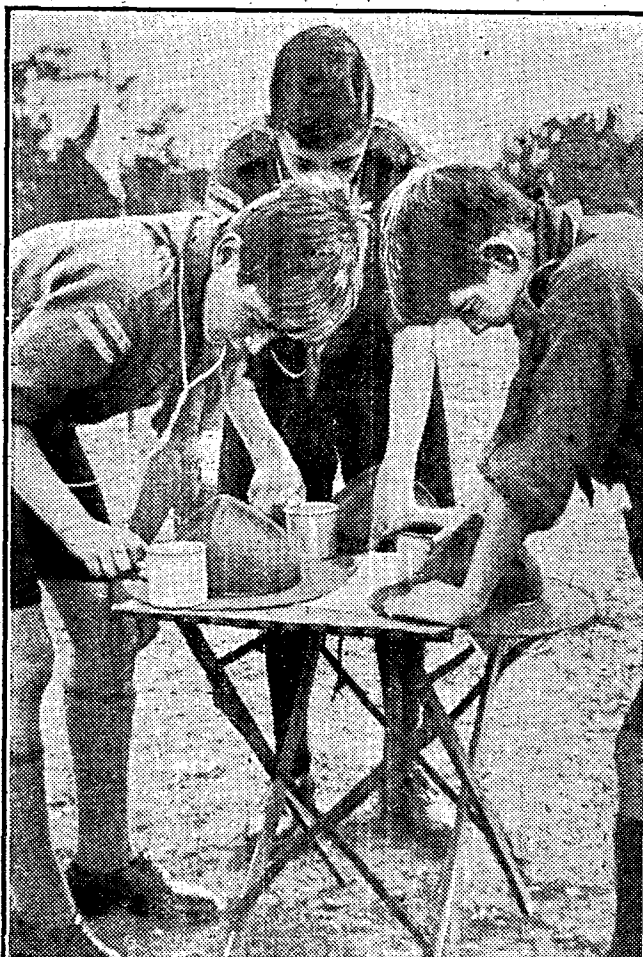
Food for the Soil—Seaweed makes an excellent food for the soil, and large quantities are collected and put on the land. Here we see the carts carrying off the seaweed at Margate



Herrings Invade a River—So great has been the number of herrings off the Devonshire coast that large numbers went for miles up the River Dart, where they were caught in nets



The Doctor Starts on His Rounds—Dr. Wilfred Grenfell, who has done so much for the people of Labrador, has just been visiting England. He is here starting off on a winter medical tour to see his scattered patients



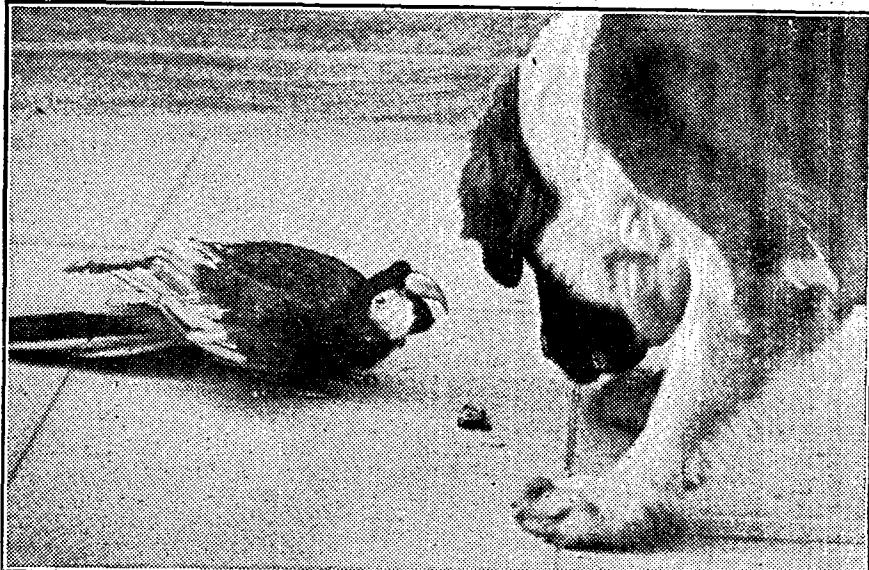
Getting Ready for a Parade—Boy Scouts are always ready for any emergency. The brims of their hats often get crinkled and bent out of shape after a heavy rain, but the boys soon make them smart again by ironing them with enamelled mugs filled with hot cinders



Safety First in the Roadway—In one of Leeds' busiest streets safety-zone posts are set up in the daytime for people crossing the road or waiting to board cars



Chinese Nursemaid in London—One mother in London has solved the servant problem by having a Chinese nursemaid to take the baby for its daily outing in the Park, and the maid's dress attracts much attention



A Battle in the Street—A curious scene was witnessed the other day in a London street, where a parrot and a large Newfoundland dog quarrelled over a dainty titbit that lay on the pavement. The dog was nervous of its opponent's sharp beak, and Poll was able to hold her own



The Thief in the Park—This amusing snapshot, taken in Hyde Park, shows one of the tame squirrels trying to take a morsel of food from the basket of a visitor who had placed it on the ground while she watched the ducks for a moment. The squirrels have become very bold

ALL THE WORLD LOVES THE C.N. MONTHLY. ASK FOR MY MAGAZINE. EDITED BY ARTHUR MEE

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